THE READER

A REVIEW OF LITERATURE, SCIENCE, AND ART.

No. 139, Vol. VI.

Saturday, August 26, 1865.

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Wednesday, 6th September.—President's Address, at Eight P.M., in the Town Hall. Sectional Meetings daily, as usual, from the 7th to the 12th inclusive.

Wednesday, 13th September.—Concluding General Meeting. Thursday, 7th September.-Soirée in the Town Hall. 8th September.—Evening Lecture in the Town Hall. Friday,

Monday, 11th September.-Evening Lecture and Soirée. 12th September.—Soirée in the Town Hall. Tuesday. Saturday,

9th September.—Excursions to Warwick, and
Stratford-upon-Avon; Coventry and Kenilworth; Worcester
and Malvern; and to Wroxeter,
Shrewsbury, Wenlock, the
Wrekin, and Coalbrookdale.

Thursday, 14th September.—Excursions to Dudley Caverns, the South Staffordshire Coal Fields and Ironworks; and to Lichfield, Walsall, Cannock Chase, and the Burton Breweries.

On and after August 7th, until September 2nd, Life Members who intend to be present at the Meeting may receive their Tickets by applying to the General Treasurer, and returning to him their Life Member's Invitation Circular; Annual Subscribers who wish to receive their Tickets must return their Invitation Circular, with £1 enclosed, to the General Treasurer, W. Spottiswoode, Esq., 50 Grosvenor Place, London, S.W.

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SATURDAY, AUGUST 26, 1865.

THE STATE AND EDUCATION.

T may be remembered that a few weeks since we invited discussion to the principle which should guide the State in dealing with education, à propos of certain changes of a fundamental kind now contemplated by the Government in the educational system of Ireland. We have had the satisfaction of finding our invitation responded to by the same journal the enunciation of whose views on this question suggested it, and in a spirit and tone of which we shall best show our appreciation by endeavouring to imitate them. The Daily News, in its reply, adheres to the doctrine which we ventured to impugn, maintaining it to be "an essential part of "the principle of religious freedom in its ap-" plication to modern society." We propose to-day to recur to the subject, in the hope, if not of converting our contemporary, at all events of defining more strictly the elements of the problem in debate, possibly of contributing something towards its definitive solution.

The question raised by the passage in The Daily News to which we took exception was the general one, as to the attitude which the State should assume in relation to the diversities of view on the subject of education which may happen to exist in a country. According to The Daily News, the State should, under all circumstances, as between such differing views, preserve absolute neutrality: anything short of this, "anything which en-"lists the State on the side of one theory " of education rather than another," is "ipso " facto opposed to true Liberalism." This view we controverted, maintaining that, at all events, in the case of communities which occupy a lower grade in civilization than the average of the governing bodysuch as India or Ireland—the State is not bound to this absolutely neutral position, but may establish in such communities, as one among other competing systems, a plan of education of its own, such as might never have been evolved by the people themselves under the guidance of their own aspirations, or through the initiative of their native leaders. In the remarks with which our contemporary has favoured us in reply, a further difference has come into view, as to what the practical effect would be of applying the doctrine of State neutrality in educational matters to Ireland. On this point we propose also to offer some observations; but first we wish to deal with the general question.

We must own that, having carefully read the article in The Daily News, we are unable to find in it any clear indication of the grounds, either of our contemporary's adherence to the principle he has advanced, or of his dissent from our view. He reiterates his own proposition, already quoted, but he has not attempted to deal with the arguments which we urged against it. Is he prepared to carry out his principle to its logical consequences, and, applying it for example to India, to require that the State shall there assume an attitude of absolute impartiality as between Asiatic and European educational systems, either endowing all without distinction, or abstaining altogether from the endowment of any? Or, again, does he regard the so-called "spiritual influence," of which we gave him an example drawn from Irish experience, as a legitimate social force, demanding from the State the same consideration as those which seek to sway conduct by appeals to the reason and heart? Beyond an expression of "dislike to see "the State undertaking the delicate task "of classifying conscientious sanctions"—a dislike which we fully share, and, as we think, consistently share, while denying the title of "conscientious sanctions" to such practices as we described—he has made no reference to these and other topics urged in opposition to his view.

On the other hand, there are passages in the article involving concessions, the full importance of which, in reference to the principle in debate, the writer scarcely seems to appreciate. In one place, for example, he speaks of "the standard of " secular education, which the State has " an undoubted right to prescribe;" in another the rules of the Irish National System are approved, because in them the State "interferes with denominational "education, so far, and so far only, as it " can be turned into an engine of pro-" selytism." Now here is a manifest departure from the rigour of the rule which had been laid down. It seems that, at all events in secular education, the State has a right to exercise a choice, to pronounce in favour of certain educational results as against others; and, not only this, but is justified in interfering with the process by which such results are arrived at, if they are of a kind which may be turned to the purposes of proselytism. Here, we say, are manifest limitations of the general principle of State neutrality in education. Well, what are the grounds of those limitations? The Daily News does not state them, and we believe it would be impossible to state them without introducing considerations which reach much further than our contemporary is disposed to go, even to the full length of the principle for which we contend.

For ourselves, we know of no justification of the State's assumed prerogative to prescribe the standard of secular education other than this-that in the actual condition of civilized society governing bodies are, as a matter of fact, better qualified to appreciate the need of intellectual acquirements, and the sort of acquirements needed, than the mass of the governed. On any other supposition than this the right of the State to prescribe the standard of education seems to be no better than an usurpation. In India the State assists the education of the people on certain conditions-one of those conditions being that the instruction imparted shall be of a certain kind. The standard thus set up is certainly not that which the people of the country, under the guidance of their native leaders, would themselves have erected. The same is true of Ireland: the native standard there equally differs from the State If it be held that Instandard. dian and Irish opinion is entitled to equal weight, in the matter of education, with imperial opinion, we do not see how the State prerogative asserted by our contemporary can be defended: if this be not the view taken-if it be assumed that the imperial governing body, in virtue of its representing a high grade of cultivation, is authorized to dictate the kind of secular education to which the national sanction shall be given-then why should its authority be confined within the purely arbitrary

limits laid down by our contemporary? Why, for example, should the State be pronounced competent to exercise a choice upon the courses of study to be pursued, and even to discountenance methods of instruction which offer facilities for proselytism, and yet not competent to pronounce generally on the merits of an educational system? The sort of educational results which can be ascertained by a University examination are certainly not more important, or more pertinent to the purposes for which civil government exists, than those which depend upon the mode in which instruction is imparted, and upon the influences brought to bear upon the learner during the reception of knowledge. If, then, to bring the argument down to the facts of the case which suggested it, the State be of opinion that these latter results can be obtained in higher perfection under a system of education founded on an unsectarian basis, in which the youth of various religious parties meet together on equal terms upon common ground, what is to prevent it from pronouncing in favour of such a system, and maintaining it, in spite of the opposition, and even because of the opposition, which it may encounter from the prejudices and bigotry of ecclesiastical leaders, wielding an influence far more akin to physical than to any moral force? It will, of course, be understood that we are not contending for the right of the State to an exclusive control over the education of a country—we yield to no one in the energy of our repudiation of any such pretension-but for its right to exercise a choice, to take a side, to establish as one among competing schemes-at all events in communities in which the grade of cultivation prevailing is lower than its own—that form of education which it deems the best.

We have left ourselves but little space to deal with the practical question, as to the effect of applying the principle of Stateneutrality in education to Ireland; but we do not apprehend that there can be much difference of opinion upon this point. All who have attended to the history of edu! cation in Ireland are aware that both the National System and the Queen's Colleges have encountered the most violent and unremitting opposition from the most powerful parties in that country, against whose assaults they have only held their ground through the steady support accorded to them by successive Governments. Adopt the principle that the State has no right to exercise a choice in education, and this support must be withdrawn; and what then is to prevent the existing social tendencies from finding their natural issue in the transformation, in a sectarian sense, of the present system of Irish education? This view is perfectly consistent with believing, as we do believe, that the system in question is entirely acceptable to the great bulk of the Irish people; because, as we explained on a former occasion, although they prefer it to that which their ecclesiastical rulers would give them in its place (as has been proved by many a decisive experiment), their preference is not sustained by such strength of conviction as would lead them to set at defiance for this cause the spiritual terrors which those rulers, had they the power to mould the present system at their pleasure, would undoubtedly launch against all who should oppose their designs. In the absence, therefore, of a distinct State policy on this

question, the parties represented by Mr. Hennessy and Mr. Whiteside would find nothing opposed to them-a state of things which could only end in the definitive triumph of the denominational scheme. The particular measure lately announced by Government is, of course, but one step in this direction; but that it is a step in this direction The Daily News has itself, by implication, asserted, since it justifies the proposal distinctly upon grounds which, as we have shown, inevitably lead to this result. Our contemporary is perfectly logical. Accept his principle, and the Government proposal inevitably follows, as does also the destruction of the liberal system which has been established and maintained on a radically opposite view of State duties.

One word we have to add on the alleged grievance of the Ultramontanes in the refusal of a charter to the Catholic University. Impartiality, it is said, is violated, while this institution is "un-"able to confer on its students those "degrees which are the natural con-" clusion of their university course, not " because the standard of secular educa-"tion is too low-for that the Govern-"ment has not taken any steps to deter-" mine—but because it is constituted on a " strictly denominational basis." But here we join issue with our contemporary on facts. It is not true that the Government has taken no steps to determine the quality of the education given in the Catholic University. The halls of the London University are open to its students in common with those from all parts of the kingdom, under whatever system they may have been educated. If what its students desire is a state certificate of attainment in secular knowledge, this there is no obstacle to their obtain-They need not even cross St. George's Channel for the purpose. believe we are correct in stating that the London University has been lately empowered to hold examinations for degrees in Dublin, and, if required, in the halls of the Catholic establishment itself. Where, then, is the grievance? In the fact, that Ultramontane views of education are not represented in the examining body? Rather, we should say, in the fact that there is no chance that they should ever there become preponderant—a grievance which will not go for much with those who, with our contemporary and with ourselves, hold "the undoubted right of the State to prescribe the standard of secular education. J. E. C.

CURRENT LITERATURE.

GUSTAVUS ADOLPHUS.

Gustavus Adolphus: Social Aspects of the Thirty Years' War. Two Lectures. By Richard Chenevix Trench, Archbishop of Dublin. (Macmillan.)

EVERYTHING which Archbishop Trench writes is sure to be elegant and scholar-like, and invariably unites genial breadth to classic refinement; but there is a grievous lack of force, depth, suggestiveness, originality. Exceedingly pleasing, these lectures are by no means remarkable productions. They are rhetorical compilations from historical compilations: but the eloquence is not sufficiently striking to compensate for the absence of research. The style also is not so pure and perfect as it might be, and as we have a right to expect from an author who has discoursed so much and so well on language and composition. It is sluggish

and flaccid, now and then even slovenly. The Carlylese turns and tinges which disfigure it we ascribe to no intentional imitation on the part of the writer, but to the influence of books which riot so widely in fantastic forms and hot and lavish colours as those of Car-Whether the pictorial style is the lyle. highest literary style we doubt. To the Greeks and Romans it was wholly unknown; and yet they contrived without it to achieve masterpieces which the modern world has never approached. In Carlyle's case, however, the pictorial style is eminently spontaneous and natural. Moreover, Carlyle is not merely a great painter in the management of colour, but also in the art of grouping. He always gives us complete pictures, though we may complain that frequently the tints are too glaring, or do not harmonize well, or that the perspective is faulty, or that there are sins against taste generally. Now Archbishop Trench, besides being a colourless writer, is unable to group, cannot bring a vast mass of objects together as a living and connected whole. His attempts at being graphic, therefore, are inevitably unfortunate. They simply provoke unfavourable comparisons.

Furthermore, as the champion and representative of what is best in "English, past and present," Archbishop Trench should avoid those colloquialisms, those vulgarisms, those commonplace expressions, those declamatory platitudes, those cheap and tawdry metaphors, which so signally and wofully deface and degrade our existing literature. To one who is intimately acquainted with "English, past and present," there is something infinitely offensive in such flabby fashions of utterance as the following: "When these things were being done,"
"while such horrors were being enacted."
Penny-a-lining and platform oratory have
made us familiar with all sorts of clumsiness in speech, as with all that is feeble and fatuous in thought; but Archbishop Trench is one of our literary teachers and guardians, and should save us from the prevailing plague, instead of being its active propagator.

Should not likewise an archbishop—not to speak of a distinguished literary archbishop—hold grammar to be scarcely less sacred than orthodoxy? But is it grammatical, even if it were euphonious, to say, "It would indeed have been madness for him to have done it!" A fastidious purism may be a fault; yet, why should we not be as accurate, when writing English, as if we were writing Latin or French?

The author's estimate of Gustavus Adolphus, of the Thirty Years' War, and of its results, is, in the main, impartial and enlightened. Every page breathes tolerance, and is marked by humane, generous, and elevated sentiments. Nevertheless, the whole thing is so very smooth and so very amiable as almost to be insipid. Having given us a readable volume, Archbishop Trench so far disarms criticism. It is obvious, however, that the Thirty Years' War cannot be viewed as nothing more than a Titanic episode in the history of Europe, and that to contemplate the character of Gustavus Adolphus thoroughly, comprehensively, and aright, we must patiently study the records of that Far North, the birthplace of giants, which had sent forth its Vikings, as conquerors, to sunnier climes, and which now sent forth a hero, not to desolate, but to save. As it was in Germany that the Reformation commenced, it was fitting that in Germany the fate of the Reformation should be decided. Yet who sees not that the epic grandeur and the religious interest begin and end with the brief, meteoric campaigns of the incom-parable Swedish King? In what went before, and in what followed, we have ghastliness on ghastliness, abomination on abomination, a wearisome monotony of havoc, rapine, famine, pestilence, and fraud.

The key to all that is saddest, deepest, most complicated in the politics of the sixteenth and seventeenth centuries is, that Spain alone hindered the universal triumph of the Reformation, which, but for Spain,

would have encountered no serious resistance in Italy, France, and Southern Germany. What made the Spaniards the most sombre and cruel of bigots in a land where everything invites to joy? The long, fierce contest with the Moors does not by itself explain a ferocious fanaticism, which seems inex-tinguishable, for it still throws a funereal gloom over a region where the sky does not grudge its light, the earth its fruits. Trace its origin how we may, the morose and persecuting temper of Spaniards, typified, incarnated in a Philip II., was for a season Christendom's one supreme woe and curse. Everywhere the Reactionaries were Spanish factions. What were the Guises but the leaders of a Spanish party? What were the Popes but Spanish Satraps, after, escaping from a more ignominious bondage, they ceased to be French lackeys? What were the Popish plotters in England except Spanish agents? What were the narrow-minded and narrow-hearted Emperor Ferdinand II., the abler and wiser, but more unscrupulous, Maximilian I., Elector of Bavaria, the heads of the crusade against Protestant liberties? the instruments of the vast Spanish conspiracy. What, above all, were the Jesuits? a Spanish police; in Spain they had arisen, and from Spain they received their commands, their inspiration.

Archbishop Trench has some sound remarks in reprobation of the fatalistic theory in the historical development of mankind. With those remarks we concur. But the fatalistic theory and other false historical theories—whether propounded by Buckle, or by those French Materialists from whom Buckle's doctrines were borrowed—cannot be refuted by mere argument. Such theories are the offspring of defective historical knowledge and defective historical sympathy. The superficial and the ignorant can alone be fatalists. Now Archbishop Trench, though he admires what is noblest in the past in calm, languid, æsthetical mode, and as a delightful association of his library, yet gives no proof that he knows the past well, or that he can place himself, by yearning responsive heart and by glowing fecund imagination, in the centre of its ideas, struggles, and passions. How, then, can he, by the omnipotence of genius, summon the past from the dead? He does not, with prophetic fervour, with poetic force, with historical insight, unveil to us the elements in which the terrific conflict moved, or those from which it emerged. Partly with a concave, and partly with a convex mirror, he coldly, conscientiously, yet not faithfully, reproduces the surface, and only a small portion of the surface. These figures that he arrays before us were once men; they are now putrefactions. Is it not silly to tell us that Gustavus was prone to anger, and was not free from ambition; as if these were grievous faults? What would he have been to friend or foe, unless he had sometimes thundered like the grimmest of the old Scandinavian gods? And what could he have achieved if he had been destitute of an ardent ambition? Would that he had been a little more ambitious, without ceasing to be loftily ambitious! Suppose that he dreamed of being Protestant emperor; of making Scandinavia lawgiver to Germany; of giving to Protestantism a military and political as well as religious supremacy. Why blame him for a magnificent vision, which, if realized, would have conferred benefits as immense as enduring?

If Archbishop Trench deemed it his duty, as theologian and moralist, to rebuke the Swedish King's wrathful tendencies and daring aspirations, he should not have overlooked atoning merits, of which we do not catch the faintest glimpse in these lectures. It was not least among the many excellencies of Gustavus Adolphus that, while the devoutest, most earnest man of his age, he was, in the best sense, the most tolerant man of his age. There are two kinds of tolerance. The one is simple indifferentism, an absolute apathy in regard to our neighbour's beliefs and doings. Common enough in our own

day, it is an evil, not a good, as revealing the absence of those definite and resolute convictions which are the necessary and adamantine basis of personal and public virtue. But there is a tolerance of a holier mould. If, as a principle—a life, not a dogma—we cling so courageously and enthusiastically to the truth as to be ready to die for it, yet, in our compassion toward human infirmity and error, we allow our neighbour the same freedom in the formation and expression of his opinions, and in his commune with the invisible, which we ourselves claim-then is our tolerance one of the angelic graces. This was the tolerance of the Swedish monarch, a tolerance the more laudable from the bitter hatred towards the Catholics which the Protestants took no pains to conceal. The King's mild treatment of the Catholics in Germany surprised some of his fellow-religionists, made others angry and suspicious. On one point only was the King inexorable. In a speech which he delivered to his States, in 1617, he used these words: "That devil's party, the Jesuits, the cause of all the horrible yranny in Spain, France, and elsewhere." He loathed the Jesuits, and he lost no opportunity of smiting them. As a ruler, he was the appointed upholder of order, and dear and needful as liberty may be to mankind, order is dearer and more needful still. The Jesuits were the grand disturbers of order, the supreme architects of anarchy. They had not even the excuse of fanaticism: they never were fanatical; they went to work with all the coolness and deliberation of thugs. We have lately seen that the Jesuitism which inspired the Pope's Encyclical is not very dif-ferent from the Jesuitism of older date. Not long ago, when the clergy in Belgium were clamouring loudly for liberty of teaching, it was found that they put into the hands of the children books containing extravagant praise of the Inquisition. Of the Catholics, as a body, we would not utter one uncharitable or disparaging word, for they are not accountable for the wicked deeds done in the name of the religion they profess. ecclesiastical thuggery is ecclesiastical thuggery, by whatever name called. When Archbishop Trench laments the "loveless temper in which the whole controversy with Rome had been carried on since the Reformation," is he not venturing rather too near the domain of twaddle? Let us appreciate cordially what was divinest in Catholicism at its divinest epoch; let us do this as philosophers, let us do it as chivalrous men. But the Protestants were in the very heat and heart of a furious combat; they had no time to make dainty homilies on brotherly love, and nice, delicate, philosophical distinctions. If they had paused for an instant, to wipe the dust, the sweat, and the blood, from the brow of an expiring foe, they would have been mercilessly pierced by some hostile weapon. Therefore, the Swedish King's general tolerance was quite compatible with his assaults on what, hiding itself in saintly garments, he execrated as devilish. We are afraid that theological controversy always engenders a "loveless temper;" and the most recent example of this 'loveless temper,' the total want of justice, fairness, and clemency, we have witnessed in our own bishops and archbishops, whose harsh course, when dealing with a notable heretic, has probably not been wholly disapproved by Archbishop Trench.

Of the other attractive aspects, besides a beautiful tolerance, of the Swedish King's character and career, which Archbishop Trench has not deigned to glance at—thus leaving the portrait of a mighty man poor and incomplete—we may mention the indefatigable efforts of Gustavus Adolphus to improve the law and the administration, to promote the commercial and the industrial progress of Sweden, and to develop its mineral wealth, to enlarge the scope and to increase the means of education, to diffuse an enlightenment, and to establish on solid foundations a prosperity from which no class was to be excluded. The King munificently endowed the Univer-

sity of Upsala. This Poliorcetes, this stormer of cities, was, in his own land, a creator of cities, and he energetically encouraged road-making, that all the various parts of his dominions might have safe and speedy intercourse with each other. A Frenchman, who visited Sweden shortly after the King's death, testifies that nowhere did he see the rags, the nakedness, the squalor, the misery, which were the reproach of his own country at that period; that he beheld only signs of comfort and happiness.

The author speaks of his journeys to the British Museum, when preparing these lectures. We regret that the result is so slender. Most of the journeys might have been saved if the author had read a good history of Sweden, such as that by Geijer, and the fruits would have been more abundant and savory. In truth, though we are grateful to Archbishop Trench for trying to revive the interest of English readers in a memorable drama and its hero, we are compelled to pronounce his work a somewhat painful specimen of literary dilettanteism.

THE ROMANCE OF LONDON.

Romance of London. Strange Stories, Scenes, and Remarkable Persons of the Great Town. By John Timbs, F.S.A., Author of a Century of Anecdote, &c. In Three Volumes. (Richard Bentley.)

THERE is in literature a species of debateable land, bordering on the possessions of antiquarianism and of history, but strictly belonging to neither. This territory, besides being occupied at will by the troops of each of its neighbours, has an undisciplined soldiery of its own, which, owning no allegiance to either, takes part in turn with each, besides waging, when it suits its purpose, a little independent war on its own account. One of the most successful among these Free Lances is Mr. Timbs, and among the results of his foray into these regions are his present volumes.

The "Romance of London" is not, as its title would almost imply, a consecutive narrative in the form of an historical novel, but a collection of "strange stories, scenes, adventures, and vicissitudes associated with London." It is a réchauffé of the old chroniclers, of Camden, Selden, Pennant, Ned Ward, Spence's Anecdotes, Stone's Every Day Table and Year Books, Leigh Hunt's "The Town," Peter Cunningham's "Handbook to London," and "The Newgate Calendar." Its worst fault is, that it is a mere piece of book-making; its most conspicuous merit, that its contents are well selected and genuinely amusing. It contains something like three hundred articles, and these are classified under heads which are fully explanatory of their nature. These heads are Historic Sketches, Remarkable Duels, Notorious Highwaymen, Rogueries, Crimes and Punishments, Love and Marriage, Supernatural Stories, Sights, Shows and Public Amusements, Strange Adventures and Catastrophes, and Remarkable Persons. A few remaining stories, which defy any other form of classification, are thrown together with the head Miscellaneous.

The sources whence Mr. Timbs has obtained his materials have already been so often drawn upon for similar purposes, that little that is novel in the way either of information or anecdote was left him, but in no previous work that we are aware of has so much that is curious and interesting in connexion with the history, curiosities, and antiquities of London been drawn together, and in none is the system of arrangement more convenient for purposes of reference. The more tragic portion of what remains of the history of London connects itself with few spots. Owing to the ravages of the Great Fire, and to other similar causes, the streets of London have no such melancholy interest as attached itself until a very recent period to those of Paris, and what is most gloomy in the records collected by Mr. Timbs is chiefly associated with the Tower. An interesting chapter is

devoted to the Beauchamp Tower and the doleful inscriptions of the State Prison Room. Of these the most suggestive and poetical is the IANE, IANE, supposed to have been cut by Lord Guildford Dudley during his solitary imprisonment, and constituting the only memorial of the Lady Jane Grey, which the sad scene of her captivity preserves. The restless and ambitious race of the Dudleys, in one or other of its branches, appears to have contributed a large proportion of the inmates of the Tower. One of the most conspicuous and elaborate devices on the walls is that of John Dodle, Earl of Warwick, who died in this room after his abortive attempt to deprive Mary of the Crown; elsewhere is the signature and device of Robert Dudley, Earl of Leicester; and on the ground-floor is the signature of Robart Dudley, the third son of John Dudley, Duke of Northumberland, who was beheaded on Tower Hill in 1553, for high treason, while his son barely escaped a similar penalty to which he had been condemned. Next in number to the mementoes of the Dudleys preserved in the Tower, are those of the Peverils. The most interesting records in connexion with the Tower given by Mr. Timbs are those of the attempt of Colonel Blood to steal the Regalia and of the mysterious death of Sir Thomas Overbury. One of the most extraordinary outrages which the streets of London ever witnessed was the attempt made by Colonel Blood, the same alluded to above, to seize the Duke of Ormond, then Lord-Lieutenant of Ireland, and to hang him at Tyburn. This desperate freak of revenge was almost accomplished. In "Remarkable Duels" London is not very rich, and the stories preserved by Mr. Timbs read but tamely after the stirring histories of Brantôme, or even beside the accounts which occasionally reach us from Ireland, par excellence the land of duels. The most exciting combat of which he has preserved the particulars is that between the Duke of Hamilton and Lord Mohun, so stirringly described by Thackeray in his Esmond. The duel between Lord Byron, grand-uncle of the poet, and Mr. Chaworth has little interest amongst English and Mr. lish duellists. Lord Camelford bears off the palm, and a madder and more turbulent existence than that he led, till the bullet of Captain Best put a stop to it, cannot well be

In the public life of the metropolis, his pugnacity most strangely displayed itself. On the night of April 2, 1799, at Drury Lane Theatre, Lord Camelford savagely assaulted and wounded a gentleman, for which assault a jury of the Court of King's Bench returned a verdict against him of 500%. Soon after this affair he added an attack upon four watchmen in Cavendish Square, when, after an hour's conflict, his lordship and the other assailants were captured, and, guarded by twenty armed watchmen, were conveyed to the watch-house. In another freak of this kind, on the night of a general illumination for Peace in 1801, Lord Camelford would not suffer lights to be the windows of his a partments at grocer's in New Bond Street. The mob assailed the house with a shower of stones at the windows, when his lordship sallied out, and with a stout cudgel kept up a long conflict, until he was overpowered by numbers, and retreated in a deplorable condition. His name had now become a terror. Entering, one evening, the Prince of Wales's Coffee House in Conduit Street, he sat down to read the newspapers. Soon after came in a conceited fop, who seated himself opposite his lordship, and desired the waiter to bring a pint of Madeira, and a couple of way condles and put them into the wax candles, and put them into the next box. He then drew to himself Lord Camelford's candle and began to read. His lordship glanced at him indignantly, and then continued reading. The waiter announced the fop's commands completed, when he lounged round into the box and began to read. Lord Camelford then, mimicking the tone of the coxcomb, called for a pair of sing the tone of the coxcomb, called for a pair of snuffers, deliberately walked to his box, snuffed out both candles, and his lordship deliberately returned to his seat. The coxcomb, boiling with rage, roared out "Waiter! who is this fellow that dares thus to insult a gentlemen? Who is he? What is he? What do they call him?" "Lord Camelford, Sir," replied the waiter. "Who? Lord Camelford!" returned the fop, in

a tone of voice scarcely audible, terror-struck at his own impertinence—"Lord Camelford! What have I to pay?" On being told, he laid down, the money and stole away, without daring to taste his Madeira.

James Horace Smith relates that, having witnessed a combat between Lord Camelford and an inebriated lieutenant, in which the former though victor was certainly not the aggressor, they called on his lordship to tell him they were witnesses of the assault committed upon him. They give an amusing account of his lodgings, and quote his characteristic reply given with the utmost cordiality, "All I can say in return is this. If ever I see you engaged in a row, upon my soul, I'll

stand by you." Among fashionable highwaymen the place of honour is assigned to Claude Duval, Dick Turpin being stated, on the authority of Lord Macaulay, as far as the notorious ride to York was concerned, to be an impostor. It is difficult to believe that so recently as 1783 there was appended to the play-bills at Sadler's Wells Theatre the following notice: "June, 1783.—Patroles, horse and foot, are stationed from Sadler's Wells Gate, along the New-road to Tottenham Court Turnpike, &c., between the hours of eight and eleven. Even so late as 1799, it was necessary "to order a party of light horse to patrol every night from Hyde Park Corner to Kensington." Among the "Knights of the Road" appear to have been at different times many members of aristocratic families and one bishop. Among the deeds of violence connected with London, the most atrocious are the murder of Mountfort, the player, by Captain Richard Hill and Lord Mohun, by the latter of whom the Duke of Hamilton was subsequently slain; and the famous Ratcliffe Highway murders by Williams, of which De Quincy, in his "Murder Considered as one of the Fine Arts," has made one of the most forcible and terrible pictures which literature can furnish. Turning to milder subjects, we have a full account of the marriages in the Fleet and the Savoy, of the once notorious Cock-lane Ghost, and of the famous pig-faced lady. One of the most humorous sketches is that describing the attempt made, in the year 1738, to exclude the ladies from the gallery of the House of Lords, and the signal and most merited failure in which so ungallant an attempt resulted. The ladies, headed by Lady Huntingdon, the Duchess of Queensbury, Lady Westmoreland, Lady Cobham, Lady Archibald Hamilton, Lady Charlotte Edwin, and others, presented themselves at the door at nine o'clock in the morning, and were informed by Sir William Saunderson that the Chancellor had made an order against their admittance. "The Duchess of Queensbury, as head of the squadron, pished at the ill-breeding of a mere lawyer, and desired him to let them upstairs privately. After some modest refusals he swore by G- he would not let them in. Her Grace, with a noble warmth, answered by G-they would come in, in spite of the Chancellor and the whole House." The stratagem by which their entrance was at length secured, reflects great credit on their

These Amazons now showed themselves qualified for the duty even of foot soldiers; they stood there till five in the afternoon, without either sustenance or evacuation, every now and then playing volleys of thumps, kicks, and raps against the door, with so much violence that the speakers in the House were scarce heard. When the Lords were not to be conquered by this, the two Duchesses (very well apprised of the use of stratagem in war) commanded a dead silence of half an hour; and the Chancellor, who thought this a certain proof of their absence (the Commons also being very impatient to enter), gave order for the opening of the door; upon which they all rushed in, pushed aside their competitors, and placed themselves in the front rows of the gallery. They stayed there till after eleven, when the House rose; and during the debate gave applause, and showed marks of dislike, not only by smiles and winks (which have always been allowed in such cases), but by noisy

sagacity :-

laughs and contempts; which is supposed the true reason why poor Lord Hervey spoke so miserably.

In one of his articles, Mr. Timbs would deprive Lord Macaulay of his claim to have originated the now celebrated figure of the New Zealander sitting on the mouldering arches of London Bridge. This image, it appears, had previously been employed by Shelley, Volney, Kirke White, and Horace Walpole. Lord Macaulay uses it no less than four times.

We will not dip further into these most entertaining volumes. Due praise must be accorded to Mr. Timbs for the manner in which he has accomplished his task. Marks of extreme care are visible throughout his entire work, the exactitude and fidelity of which stand in glaring contrast with the slovenliness and incorrectness disfiguring many works, similar in aim, which have recently seen the light. Mr. Timbs is a painstaking and laborious student of antiquities, and his "Romance of London" is a creditable monument of his perseverance and taste.

THE BREHON LAWS.

Ancient Laws of Ireland. Vol. I. Printed for Her Majesty's Stationery Office. (London: Longman. Dublin: Thom.)

THIS is a curious book, throwing some glimmerings of light upon a very remote and obscure period of Irish history 1852 a Government Commission, called the "Brehon Law Commission," was issued to the Lord Chancellor of Ireland, Lord Rosse, Dean Graves, Dr. Petrie, and others, appointing them to carry into effect the selection, transcription, and translation of certain documents in the Gaelic tongue containing portions of the ancient laws of Ireland, and the preparation of the same for publication. In pursuance of this, the Commissioners employed Dr. O'Donovan and Professor O'Curry, two Gaelic scholars of high distinction, to transcribe and translate various law tracts in the Irish language in the Library of Trinity College, Dublin, of the Royal Irish Academy, of the British Museum, and in the Bodleian Library at Oxford. The transcriptions occupy more than 5,000 manuscript pages, including all the law tracts which it was thought necessary to publish, and have nearly all been translated; but the two chosen scholars did not live to complete and revise their translations. The portion now published was prepared for the press by W. Neilson Hancock, LL.D., first in conjuction with Dr. O'Donovan, and, after his death, with the Rev. Mr. O'Mahony, Professor of Irish in the University of Dublin. It is a volume of some 300 pages, the Irish on one page and the translation opposite, containing the first part of the Senchus Mor (we are not told how much is to follow), treating of the Law of Distress, or distraint, with an Irish introduction, and various Irish glosses and commentaries on the text.

The title Senchus Mor (pronounced "Shanchus Môr"), for which seven or eight different derivations are suggested, appears to mean "the great old laws" or "the great old decisions." The chief manuscripts of it which are known to exist are three in Trinity College, Dublin, and one in the Harleian collection in the British Museum, and the earliest of these is assigned to circa A.D. 1300. But quotations from the Senchus Mor are found in Cormac's Glossary, the greater part of which was probably composed in the ninth or tenth century, and the date of the original compilation is put by good judges, on various evidence, at A.D. 438 to 441. It is, in short, a codification and revision, under the direction of St. Patrick, of the judgments of the Pagan Brehons. Three kings, three poets, and three Christian missionaries (of whom Patrick was one) were combined in this work, and the code then established remained the national law of Ireland for nearly twelve centuries. The pagan laws embodied in this revised code were in force during a period of unknown antiquity, prior to the introduction of Christianity to the island.

The Senchus Mor has been selected by the Commissioners for early publication, as being one of the oldest and one of the most important portions of the ancient laws of Ireland which have been preserved. It exhibits the remarkable modification which these laws of Pagan origin underwent, in the fifth century, on the conversion of the Irish to Christianity.

This modification was ascribed so entirely to the influence of St. Patrick, that the Senchus Mor is described as having been called in aftertimes "Cain Patraic," or Patrick's Law.

The Senchus Mor was so much revered, that the Irish judges, called Brehons, were not authorized to abrogate any thing contained in it. The original text, of high antiquity, has been

made the subject of glosses and commentaries of more recent date; and the Senchus Mor would appear to have maintained its authority amongst the native Irish until the beginning of the seventeenth century, or for a period of 1,200 years

The English law, introduced by King Henry the Second in the twelfth century, for many years scarcely prevailed beyond the narrow limits of the English Pale (comprising the present counties of Louth, Meath, Westmeath, Kildare, Dublin, and Wicklow. Throughout the rest of Ireland the Brehons still administered their ancient laws amongst the native Irish, who were practically excluded from the privileges of the English law. The Anglo-Irish, too, adopted the Irish laws to such an extent that efforts were made to prevent their doing so by enactments first passed at the Parliament of Kilkenny in the fortieth year of King Edward III. (1367), and subsequently renewed by Stat. Henry VII., c. 8, in 1495. So late as the twenty - fourth and twenty - fifth years of the reign of King Henry VIII. (1534), George Cromer, Archbishop of Armagh and Primate of Ireland, obtained a formal pardon for having used the Brehon laws. In the reign of Queen Mary, 1554, the Earl of Kildare obtained an eric of 340 cows, for the death of his foster-brother, Robert Nugent, under the Brehon law.

The authority of the Brehon laws continued until the power of the Irish chieftains was finally broken in the reign of Queen Elizabeth, and all the Irish were received into the King's immediate protection by the proclamation of James I. This proclamation, followed as it was by the complete division of Ireland into counties, and the administration of the English laws throughout the entire country, terminated at once the necessity for and the authority of the ancient Irish laws.

The wars of Cromwell, the policy pursued by King Charles II. at the Restoration, and the results of the Revolution of 1688, prevented any revival of the Irish laws; and before the end of the seventeenth century the whole race of judges (Brehons) and professors (Ollamhs) of the Irish laws appears to have become extinct.

Portions of the text of the Senchus Mor, as we now have it, are held by Gaelic scholars to be in the language of the fifth century, in what was called the Bérla Feini dialect; other portions translated from that ancient form into Gaelic of the thirteenth century. Various ancient Irish glosses and commentaries accompany the text, and also an introduction of high antiquity, giving an account of the origin of the Senchus Mor.

"Patrick came to Erin to baptize and to disseminate religion among the Gaeidhil-i.e., in the ninth year of the reign of Theodosius, and in the fourth year of the reign of Laeghaire [pronounced, Layorie or Layrie], son of Niall, King of Erin." The combination of the Roman pagan laws with Christian doctrine in the Theodosian Code received imperial sanction in A.D. 438, and was at once adopted both in the eastern and western empires. St. Patrick, Dr. Hancock remarks, a Roman citizen, a native of a Roman province, and an eminent Christian missionary, would be certain to obtain early intelligence of the great reform of the laws of the empire, and of the great triumph of the Christian Church. Having now been six years in Erin, and established his influence there, he attempted successfully a similar reform in that remote island, and the composition of the Senchus Mor was accordingly commenced in that same year 438, and completed in about four years.

In ancient Irish books the name of the place where they were composed is usually mentioned. The introduction to the Senchus Mor contains this information, but is very peculiar in representing the book as having been composed at different places in different seasons of the year : "It was Teamhair, in the summer and in the autumn, on account of its cleanness and pleasantness during these seasons; and Rath-guthaird was the place during the winter and the spring, on account of the nearness of its fire-wood and water, and on account of its warmth in the time of winter's cold."

Teamhair, now Tara, was, at the time the Senchus Mor was composed, the residence of King Laeghaire, the monarch of Erin, and of his chief poet, Dubhthach Mac ua Lugair, who took

such a leading part in the work.

Teamhair ceased to be the residence of the kings of Ireland after the death of King Dermot, in A.D. 565, about a century and a-quarter after the Senchus Mor was composed. Remains are, after the lapse of nearly 1,400 years, to be still found, the most remarkable of their kind in Ireland which attest the ancient importance of the place.

In the introduction a curious account is given of St. Patrick's manner of dealing with the existing "professors of the sciences," and his admission of the claim of inspiration on behalf of his pagan predecessors.

Patrick requested of the men of Erin to come to one place to hold a conference with him. When they came to the conference the gospel of Christ was preached to them all; and when the men of Erin heard of the killing of the living and the resuscitation of the dead, and all the power of Patrick since his arrival in Erin; and when they saw Laeghaire with his Druids overcome by the great signs and miracles wrought in the presence of the men in Erin, they bowed down, in obedience to the will of God and Patrick.

Then Laeghaire said-"It is necessary for you, O men of Erin, that every other law should be settled and arranged by us, as well as this." "It is better to do so," said Patrick. It was then that all the professors of the sciences in Erin were assembled, and each of them exhibited his art before Patrick, in the presence of every chief

in Erin.

It was then Dubhthach was ordered to exhibit the judgments and all the poetry of Erin, and every law which prevailed among the men of Erin, through the law of nature, and the law of the seers, and in the judgments of the island of Erin, and in the poets.

They had foretold that the bright word of blessing would come—i.e., the law of the letter; for it was the Holy Spirit that spoke and prophesied through the mouths of the just men who were formerly in the island of Erin, as he had prophesied through the mouths of the chief prophets and noble fathers in the patriarchal law; for the law of nature had prevailed where

the written law did not reach.

Now the judgments of true nature which the
Holy Ghost had spoken through the mouths of the Brehons and just poets of the men of Erin, from the first occupation of this island, down to the reception of the faith, were all exhibited by Dubhthach to Patrick. What did not clash with the Word of God in the written law and in the New Testament, and with the consciences of the believers, was confirmed in the laws of the Brehons by Patrick and by the ecclesiastics and the chieftains of Erin ; for the law of nature had been quite right, except the faith, and its obligations and the harmony of the church and the people. And this is the Senchus Mor.

Nine persons were appointed to arrange this

book-viz., Patrick, and Benen, and Cairnech. three bishops; Laeghaire, and Corc, and Daire, three kings; Rosa—i.e., Mac-Trechim, and Dubhthach—i.e., a doctor of the Bérla Feini, and

Fergus-i.e., a poet.

Nofis, therefore, is the name of this book which they arranged—i.e., the knowledge of nine persons-and we have the proof of this above.

And in one of the ancient commentaries on the Introduction we are told :-

Before the coming of Patrick there had been remarkable revelations. When the Brehons deviated from the truth of nature, there appeared blotches upon their cheeks; as first of all on the right cheek of Sen Mac Aige, whenever he pro-nounced a false judgment, but they disappeared again when he had passed a true judgment, &c. Connla never passed a false judgment, through the grace of the Holy Ghost, which was upon him. Sencha Mac Col Cluin was not wont to pass judgment until he had pondered upon it in his

breast the night before. When Fachtna, his son, had passed a false judgment, if in the time of fruit, all the fruit of the territory in which it happened fell off in one night, &c. ; if in time of milk, the cows refused their calves; but if he passed a true judgment the fruit was perfect on the trees; hence he received the name of Fachtna Tulbrethach.

Sencha Mac Aililla never pronounced a false judgment without getting three permanent blotches on his face for each judgment. Fithel had the truth of nature, so that he pronounced no false judgment. Morann never pronounced a judgment without having a chain around his neck. When he pronounced a false judgment the chain tightened round his neck. If he passed a true one it expanded down upon him.

Corc and Dairè were territorial chieftains, or minor kings. Laeghaire, son of Niall of the Nine Hostages, was monarch of Erin; his reign commenced A.D. 428, four years before the arrival of Patrick, and ended with his life in 458, one year after the foundation of Armagh by that great Christian missionary. Laeghaire is usually called the first Christian King of Ireland, but it seems more likely from the evidence we have that 1e himself did not become a Christian, although he acknowledged the merit of St. Patrick, and gave him permission to preach and baptize, on condition that the peace of the kingdom should not be disturbed. Travellers in our time by mail-steamers from Holyhead and the Island of Druids, may some of them not know that Kingstown is a name given, but a few years ago, to "Dunleary"-that is, the Fortress of King Laeghaire, when George IV., by graciously landing there, supplanted the memory of the ancient king. Dubhtach, Fergus, and Rossa, or Rosa, were eminent poets and learned men; they exhibited "from memory what their predecessors had sung "-for much of the ancient law was preserved in the form of verse, and Dubhtach, "royal poet of Erin," at the compilation of the Senchus Mor, put a thread of poetry round it for Patrick." Many parts of the work as we have it are in verse.

The subject of that part of the Senchus Mor which is contained in the volume before us is the "Law of Distress"-that is, the legal rules under which distraint was to be made of persons, cattle, or goods, in a great variety of cases. To a general reader, the legal verbosity and trivial repetitions make the book hard to read; but imbedded in it, so to speak, are many curious little fragments of a very remote and obscure social system, and some of these we shall proceed to set before

our readers.

Fines in cases of death, bodily hurt, insult, or injury of whatever kind were arranged according to the dignity of the parties concerned. The "honour-price" is the same for a king, a bishop, a chief lawprofessor, and a chief poet who can compose a quatrain extemporaneously.

At a feast, "his own proper kind of food" is assigned to persons of different rank--as, for example, the haunch for the king, bishop, and literary doctor; a leg for the young chief; a steak for the queen; the heads for the charioteers; and a croichet [unknown part] for "a king opposed in his government."

Should a person have property, it shall not increase his honour-price, unless he do good with it.

A king with a personal blemish was allowed with difficulty, if at all.

In case of distress by or on a person of distinction, fasting was a necessary legal formthe creditor had to "fast upon "his debtor until a pledge was given for the claim. Something very similar to this curious process is found in the ancient Hindoo laws, and appears to be practised in India to the present day, under the name of "dherna." According to Sir William Jones, the creditor sat at the debtor's door, abstaining from food, till, for fear of becoming accountable for the man's death, the debtor paid him. As to the Irish mode of "fasting upon" a debtor of the chieftain grade, exact particu-lars are not given; but it would seem that on presentation of the claim of distraint at the

residence of the debtor, the "fasting" began, and if the debtor did not pay or give a pledge, but allowed his creditor to go on fasting (it is not said for how long), he became liable to double the debt, and other penalties.

If one of inferior grade comes to sue one of the chieftain grade, he must be accompanied, on his part, by one of the chieftain

Among articles enumerated as coming under various rather puzzling rules and exemptions in cases of distraint, we find, weapons for battle; a racehorse; a harpcomb, and other requisites for music; toys for the children—viz., "hurlets, balls, and hoops," and also "little dogs and cats;" the "eight parts which constitute a mill;" the fork and cauldron; the kneading-trough and sieve; the bed furniture-i.e., plaids and bolsters; the reflector or mirror; the chess-board; the seven valuable articles of the house of the chieftain—viz., "cauldron, vat, goblet, mug, reins, horse-bridle, and pin;" the cattle-bells; the griddle; the "branch-light of each person's house;" the lap-dog of a queen, the watch-dog, the hunting-hound; implements of weaving, and

Fines and penalties were provided, among other cases, for withholding the food-tribute from a king or chief; for the deficiency of a feast; for neglecting the due clearing of roads in war, or in winter, or at time of a fair: for neglecting the due preparation of a fair-green; for neglecting any persons or things cast ashore by the sea (in this case the "territory" was liable); for neglecting "the common net of the tribe;" for breaking the laws of rivers and fishing; for neglecting the due maintenance and medical treatment of the sick; for not helping in the erection of the common fort of the tribe; for not blessing a completed work. This last is a curious offence. "It was customary," we read in a note to p. 132, "for workmen, on completing any work, and delivering it to their employer, to give it their blessing. This was the 'abarta,' and if this blessing was omitted, the workman was subject to a fine, or loss of a portion of his fee, equal to a seventh part of his allowance of food while employed—the food to which a workman was entitled being settled by the law in proportion to the rank of the art or trade which he professed. And it would appear that the first person who saw it finished and neglected the blessing was also fined." To the present day, among Irish peasants, it is thought a marked omission if, in transferring or praising or even taking notice of any possession, especially if it be a living creature, one neglects to say "God bless it!" or "I wish you luck with it!" or some such good word; and where you see any work going on, it is right to say "God bless the work!"

Distress was levied on defaulters for share in building "the common bridge of the tribe;" for beef to nourish the chief "during the time that he is making laws;" for the "cow from every tribe," sent on demand, "when the king is on the frontier of a territory with a host." "Now, the custom is that this cow is taken from some one man of them for the whole number. They make good that cow to him only." Also for the victualling of a fort; for guarding and feeding captives; for the maintenance of a fool, or of a madwoman, or of an aged person, or of a child. "Five cows is the fine for neglecting to provide for the maintenance of the fool who has land, and power of amusing; and his having these is the cause of the smallness of the fine. Ten cows is the fine for neglecting to provide for the maintenance of every madwoman; and the reason that the fine is greater than that of the fool is, for the madwoman is not a minstrel, and has not land. If the fool has not land, or has not power of amusing, the fine for neglecting to provide for his maintenance is equal to that of the madwoman who can do no work." "A 'cumhal' of eight cows is the fine for neglecting to maintain any family senior who has land after his eighty-eighth

year. As to each man of unknown age after his ninetieth year, his land shall pass from the family who have not maintained him to an extern family who have maintained him. As to every senior of a family and man of unknown age without land, a 'cumhal' of five 'seds' is the fine for not maintaining him."

There are fines for evil words, false reports, slander, nicknames, and satire. The poets were supposed to have the power of turning a man's hair gray by force of satire, or even of killing him. There are also fines for "failure of hosting;" "the head of every family of the lay grades is to go into the battle;" "every one who has a shield to shelter him, and who is fit for battle, is to go upon the plundering excursion." "Three services of attack" are enumerated, on pirates, aggressors, and wolves; and "three services of defence," to secure "promontories [hills?], lonely passes, and boundaries."

Distress of three days for using thy horse, thy boat, thy basket, thy cart, thy chariot, for wear of thy vessel, thy vat, thy great caldron, thy caldron; for "dire" fine in respect of thy house, for stripping thy herb-garden, for stealing thy pigs, thy sheep; for wearing down thy hatchet, thy wood-axe; for consuming the things cast upon thy beach by the sea, for injuring thy meeting-hill, for digging thy silver mine, for robbing thy bee-hive, for the fury of thy fire, for the crop of thy sea-marsh, for the "dire"-fine in respect to thy corn-rick, thy turf, thy ripe corn, thy ferns, thy furze, thy rushes, if without permission; for slighting thy law, for slighting thy inter-territorial law, for enforcing thy "Urradhus" law; in the case of good fosterage, in the case of bad fosterage, the fosterage fee in the case over fosterage for cradle clothes; for recovering the dues of the common tillage land, for recovering the dues of joint fosterage, for recovering the dues of lawful relationship, for unlawful tying, over-fettering of horses, breaking a fence to let cows into the grass, breaking it before calves to let them to the cows. The restitution of the milk is in one day.

There are also fines for quarrelling in a fort; for disturbing the meeting-hill; for stripping the slain; for refusing a woman "the longed-for morsel;" for scaring the timid, with a mask or otherwise; for causing a person to blush; for carrying a boy on your back into a house so as to strike his head; for love-charms and "bed-witch-craft;" for neglect in marriage; for "setting the charmed morsel for a dog—i.e., to prove it;" for failure as to "the safety of a hostage;" for "withholding his fees from the Brehon."

For mutilation and for murder the "ericfine and honour-price" varied according to

Distress of five days' stay is "for not erecting the tomb of thy chief;" "for false boasting of a dead woman;" for satirizing her after her death; for causing to wither any kind of tree; for the eric-fine for an oath of secret murder.

In certain cases, persons were exempted from distress for a longer or shorter period. For example: "A man upon whom the test of the cauldron is enjoined—i.e., to go to a testing cauldron—and he shall have exemption until he returns;" "a man whose wife is in labour;" "a man who collects the food-tribute of a chief."

The bodies and bones of the dead are protected by penalties. There is a fixed fine and "honour-price" for carrying away the remains of a bishop out of his tomb (as relies?); also breaking bones in a churchyard, "to take the marrow out of them for sorcerers." "The bone of a king drowned in the streams, or of a hermit condemned to the sea and the wind," belongs to the people of the land where it happens to be cast, until the tribe of the deceased pay for its redemption.

There are penalties for "lookers on" at an ill deed; and these are divided into three classes: "a looker-on of full fine" is one who "instigates, and accompanies, and escorts, and exults;" of half-fine, one who does not instigate, but does the other acts; of quarterfine, one who "accompanies only, and does not prohibit, and does not save." Clerics, women, and boys, are exempt.

One is accountable (in different degrees) for one's own crime, the crime of a near kinsman, the crime of a middle kinsman, and the crime of a kinsman in general.

"There are four who have an interest in everyone who sues or is sued"—the tribe of the father, the tribe of the mother, the chief, the church; also the tribe of the fosterfather.

"Every tribe is liable after the absconding of a member of it, after warning, after notice, and after lawful waiting."

The notes to this volume are few and unimportant, and further elucidations on many points are much to be desired. The printing of the original Gaelic along with the translation must add greatly to the cost of the work, but the value of the text to philologers may perhaps make this worth while. Only we hope that this laudable and interesting undertaking, of the publication of the Ancient Laws and Institutes of Ireland, will not, like other Irish schemes that could be named, make a costly and elaborate beginning, and then, exhausting its means in the outset, break down altogether. This first volume gives us a strong desire to see the proposed plan carried into completion without undue delay. It would appear that all the heavy part of the literary work of it is already done.

THE DYAKS OF BORNEO.

Adventures among the Dyaks of Borneo. By Frederick Boyle, F.R.G.S. (Hurst & Blackett.)

OUR relish or taste must of necessity grow barbarous, whilst barbarian customs, savage manners, Indian wars, and wonders of the terra incognita, employ our leisure hours, and are the chief materials to furnish out a library. These are in our present days what books of chivalry were in those of our forefathers." Thus wrote Shaftesbury, rather more than a century and a-half ago, in his "Advice to an Author." What he would have said in these later times, when books of travel amongst the terræ incognitæ form so large a portion of the literature of the day, is a matter on which a great deal of ingenious speculation might be wasted. One thing is, however, certain. He would have discovered that the theory which is conveyed in the sentences just quoted is no longer tenable. The manners of the English people and their ideas on the subject of morals have not grown ruder or more barbarous because of the increase of our intercourse with savage nations. That the present is a wholly perfect time few would care to assert—that its manners are less civilized, or its principles of action less noble than those of its forefathers, is a theory which a still smaller number would probably be found to advance. In truth, the wretched old obstructive theory, that the best thing which can be done by a human being is to shut himself up in the solitude of his chamber, and there, like a fakir, devote his life to the contemplation of his own navel (to use Carlyle's expressive comparison) is rapidly dying out. The modern young Englishman shares in the universal notion that travel is a good thing; and that, since his own country and those about him are within the reach of every bagman who chooses to disport himself "on the Continent" in his summer holiday, the best thing that can be done is to carry his footsteps beyond the boundaries of civilization, and to try whether it be not possible to bring back from the less known countries of the world some experiences which shall serve him as lessons for life, and some memories which shall cheer the winter of his days, when travel shall for him be a thing of the past, and when another generation shall be looking to him

"for doctrine, reproof, and consolation."
Of this class of young Englishmen, Mr.
Boyle is a very fair specimen. Like most of
his fellows, he has grown tired tolerably early
in life of the shams and pretences with which
modern civilization delights to cover its
rottenness, has learned to see that, in spite of

railways, and electric telegraphs, and penny newspapers, we are not, after all, far in advance of our "benighted ancestors," and has discovered that, in spite of National Schools and Educational Committees, the condition of the working classes is worse, rather than better, than it was half-a-century back. Like many others, he can see clearly enough that "the world is out of joint," but, unlike some, he accepts it as it is, without cursing the fate which brought him into it "to set it right." Instead of attempting to do so, he has fled away to one of the least civilized of countries, and, returning, has presented the result of his travels to the English public in a very agreeable, entertaining, and unaffected book.

Mr. Boyle, with his brother, left Eng-

land in February, 1863, and went by the ordinary overland route to Singapore. With rare good sense, he has avoided inflicting the details of that extremely well-worn journey upon his readers, but dismisses the whole matter in a single page, which is, however, quite sufficient to show with how genial a companion the reader has embarked. He was detained at Singapore—which he describes as "the least sociable colony of England"-for two months, while the Rajah Brooke's mail steamer "Rainbow" was repaired. This little vessel is not unknown by name even in England. She was the steamer which carried the Bishop of Labuan in his famous action with the Illanun pirates in May, 1862. Her work, is now, however, of a more peaceful description. She is employed carrying mails, passengers, and merchandize between Singapore and Kuching, the capital of Rajah Brooke's dominions. On the third day from the time of leaving Singapore, Kuch-ing was sighted. Mr. Boyle describes it as a long, loose, straggling town, but marked by every sign of commercial prosperity. Here Sir James Brooke reigns supreme, much to the benefit of his subjects, and in this town are the head-quarters of the Bishop of Labuan. The title of this dignitary of the Church is taken from the adjacent island, simply because at the time of his appointment the Government of Borneo was not recognized. Now, however, that it is, there seems little reason in bestowing so inexpressive a title on the head of the Borneo Mission. Mr. Boyle's views of the prospects of this undertaking are not very hopeful. The magic initials which follow his name would seem to have some peculiar effect on the mental vision, since so few travellers who are entitled to bear them can say much to encourage those whose lives are spent in mission work. In the present case, our author thinks that the good done is chiefly through the native children, who are taught in the mission schools, and who may possibly grow up good Christians and most useful auxiliaries in the work of civilizing their as yet savage brethren. Besides this, however, it would appear that the work of the mission in Borneo is almost thrown away.

Truth compels me to state [says Mr. Boyle] that throughout our travels we searched in vain for a single adult convert—Chinese, Malay, or Dyak. Just before our departure, there was great triumph in Kuching over the conversion of the Orang Kaya of Lundu, a most powerful Dyak chieftain. If the worthy chief really knew what he was professing, such signal success is most gratifying; but our experience of the Dyak nature and intelligence would induce us to receive the report with the utmost caution. I say it without irreverence, but there is something almost ludicrous in the notion of a barbarous Dyak warrior comprehending or admiring the mysterious doctrines of the Christian faith.

The truth really seems to be, that the ordinary Dyak has as yet not the smallest notion of a world other than that in which he lives. He pretends to believe in a wood demon, but his faith in him is of the smallest, so that he will not hesitate to say the most disrespectful things about this, the only superior intelligence whom he deigns to acknowledge. Of course he is, like all barbarians, afraid to go out alone at night; but this probably arises rather from a dread of

the attacks of reptiles or wild beasts, than from any sense of the supernatural. "The from any sense of the supernatural. Dyak knows not how he exists-what shape he is-personally is not a bit afraid of such things-never was-always laughed at people who talked of antus—never saw one, and does not believe they exist; such are his answers when pressed with questions." On a nature which contents itself with answers such as these to the great mysteries of life, it would seem as if missionary work were almost thrown away. this is, in truth, not the case. sion has been, on the contrary, an almost unmixed benefit everywhere in the far East—a benefit which has, it is true, assumed different forms under different conditions, but which is none the less a benefit on that account. Amongst the Malays of Sarawak the presence of Christians-Christians in the proper sense of the term, that is to say—seems to have aroused the pride of the people. Until the advent of the strangers they observed the law of Mahomet very loosely, drinking wine and breaking any other of the laws of the Prophet with perfect equanimity. With the mission came in a new state of things, so that it is now as rare to see a Malay drunk as it was formerly common; from which fact Mr. Boyle draws the comforting conclusion, that even the creed of Mahomet is better than none at all. The truth is, our author looks at the entire question of missions from the standpoint of an outsider; he obtains, consequently, deductions which are rather characterized by hard-headed common sense than by hysterical fervour. His chief theory may be summed up in a very few wordsthat it is better, namely, to be a good heathen than a bad Christian. Mr. Boyle has seen the converts at some of the English mission stations; like almost every other traveller, he is not very favourably impressed by them, thinks them idle, hypocritical, and untrustworthy, and is inclined to believe that their religion is merely taken up to secure the means of living from the mission funds. The remedy he proposes has certainly the merit of simplicity, and commends itself strongly to a people who are, like ourselves, always anxious for a precedent, by the example of apostolic times. He would resort to the primitive system—would baptize a whole tribe after a few hours' teaching, and then after thousands of converts had made an open and simultaneous profession of Christianity, he would gradually inculcate the mysteries of the faith. There is undoubtedly some reason in this idea, supported as it is by the early history of Christianity, and especially by the history of that faith in our own country. Without, therefore, pretending in this place to decide upon the matter, or even to examine it with any minuteness, it is as well to repeat the theory, while we may leave it to those whom it more especially concerns to decide upon its merits. The chief interest of Mr. Boyle's book is.

however, centred in the descriptions of tropical scenery, and of the manners, habits, and customs of the "noble savages" with whom he dwelt. Of the people-the genuine Dyaks, that is to say—he speaks in the highest terms. He found them "manly, hospitable, honest, kindly, and humane to a degree which might shame ourselves." Their worst fault appears to be a habit of drinking to excess; but even in their cups the natural good-nature and courtesy of these good people was constantly manifest. Our author visited a feast on one occasion, the chief attraction of which was the unlimited supply of the national liquor-a compound which appears to be about the nastiest mess ever presented to a human being. It is, however, frightfully intoxicating, and this fact made itself known at a very early period in the evening's entertainments. Throughout the time which he spent at this feast, in spite of the drunkenness, our author "did not see a single act of impropriety, even amongst the most reckless of the revellers," while he was assured "that during the whole festivity decorum would be maintained as strictly as it was in our presence, nor would any Dyak

dream of violating the laws of decency and good temper." The scenery of the island appears to match the wild and savage beauty of the native character.

Is there a land in the temperate zone which can show through all its length and breadth the living beauty that exists in one acre of tropical jungle? Our seas, mountains, and skies are not so blue, our woods have not such a green, our trees are mere shrubs, our vegetation has no variety. But when night comes on, and the silver moonlight spreads over the landscape, illumining the great masses of vegetation, and rippling over the blackened water—when the bell of the wild deer comes in music from the glades, and a thousand vague but pleasant sounds arise from jungle and river, when the frogs boom in thunder from the morass, and swarms of fireflies flash among the trees in a sheet of living flame—then, indeed, the European must confess the poverty of his own scenery, and ask in wonder why such a land as this is peopled with such a race.

Numerous other passages in the book testify to Mr. Boyle's power of word-painting, and thorough appreciation of the beauty and natural glory of the land he describes. With one more short extract we must quit his book, though with real reluctance, and with a hope that so genial and pleasant a travelling companion will yet again give the world the opportunity of making a tour in his company. The following passage describes a journey through the interior of the island to the antimony mines at Bidi:—

I wish I could describe the beauty of that road from the wharf to the mines at Bidi. The tramway, so ugly and commonplace in the colourless fields of England, is there carried through the thickest jungle, which rises like a wall on either hand. Bright flowers, rich fruits, all shapes of vegetation, form a long vista of dreamy beauty. Vast trees, the like of which were never dreamt of in temperate zones, throw a world of green shadow around their trunks; thousands of brilliant butterflies flutter to and fro in the silent heat; all is grand, and lovely, and noiseless. No note of bird or rustle of wing breaks the silence. The burst of childish laughter, which is so much in the beauty of our English summer scenes, is never heard in this verdant desert. The crush of some giant branch yielding to the weight of centuries resounds distantly through the forest, re-echoes widely for the moment, then all is once more hot, and dreamy, and silent.

PRIMARY BELIEFS.

An Introduction to the Philosophy of Primary Beliefs. By Richard Lowndes. (Williams & Norgate.)

THIS is the acute metaphysical speculation of a mind which, largely taught by Sir W. Hamilton, has been led into some considerable divergence from his teacher. On the whole subject of the Unconditioned, Mr. Lowndes seems at issue with the Hamiltonian Philosophy, and entertains a strong repugnance to Mr. Mansel's theological applications of that philosophy.

Taking his stand on the validity of primary beliefs, Mr. Lowndes deduces from their exercise our possession of a power to think that which we cannot imagine, and applies this lever to the subversion of Hamilton's Theory of the Unconditioned. So far he is, in our judgment, entirely successful; but when he proceeds, in the sequel, to argue the external truth of the Christian doctrines from their adaptation to the primary needs of our nature, on ground corresponding with his vindication of the reality of an external world, with its essential properties, from our primary beliefs, we fail to follow him.

The cases do not seem to us analogous. When we say that the existence of an object is matter of primary belief, we but repeat ourselves when we go on to say that primary beliefs, being trustworthy, are to be accepted. The object of primary belief is, of course, as such, believed in, and its reality and presence are presumed. But if these be presumed, it is to them that we must attribute the belief in them. Call it as primary as you will, it is no belief at all unless it is supposed to be brought into being by contact with the thing believed in. In other words, belief,

whether primary or not, supposes the presence of the thing believed. But a need, whether primary or not, supposes, in the first instance, the absence of the thing needed. With the removal of the object believed, the belief is removed at once. But the need will go on without its object. Primary beliefs, therefore, and primary needs, are scarcely analogous enough for our author's purpose. A man may very well say that he has no such strong warrant for believing in anything, as that neither he nor anyone else can help doing so. If he disputes this warrant, he may as well give up all further inquiry, reasoning, or investigation whatsoever. But though the existence of a primary and universal need presents a probability that an object will be provided to meet it, it does no more. We do not contradict our being, and turn every exercise of faculty into futility, if we suppose the need to exist without an object.

Between the validity of primary beliefs and primary moral sentiments, there is indeed the fullest analogy. The data of the pure and the data of the practical reason differ only in as far as the first have is, and the second have ought for copula. But no confidence such as we are obliged to give to the first forms of mind, forcing us to rely on perceptions in the one region, and on sentiments in the other, can authenticate what, if true, is true as an historical fact. That, if rationally believed, must be believed on the same conditions as any other historical fact. Its harmony with primary beliefs, and with primary sentiments, gives force to historical warrant, but can neither dispense with that, nor place our acceptance of it, on the same ground with our perceptions of the external world, or the immediate decrees of conscience.

It may, however, be placed on the same ground by him who shall proclaim that he believes in the Gospel as he believes in the things around him, not in virtue of argument, but of that which is antecedent to argument, immediate perception and consciousness. "We have heard him ourselves, "and know that this is indeed the Christ, the "Saviour of the world." This was the utterance of the Samaritan Sycharites, and has been the virtual utterance of thousands upon thousands ever since. But Mr. Lowndes has not accepted this position—nay, in words, has rejected it. He speaks (p. 257) as follows: "It has never been pretended that some re-"velation is requisite, in order to our feeling "solidly convinced as to the existence of an external world, or of a self, or of a causal "force, or of space or time, -objects which, "as has been shown, are certified to us solely "by the uncomprehended presence of active "beliefs within our own mind. Why, then, "should we draw a distinction between the "primary data of the spiritual and those of "the intellectual portions of our nature? "Why insist upon the need of a revelation. "for one rather than for the other?" The truth, in our judgment, is, that a revelation is needed in both cases. No primary law of the mind would lead to our ternal world, if that external world did not manifest itself; and no sense of moral and spiritual need would engender a real faith in the facts of revelation, if those facts were not manifested—i.e., revealed. And here, then, is the real analogy between primary beliefs and a living, operative Christian faith. In both there is that immediate perception of the thing believed, which supersedes, because it anticipates, all possible argument. But, as in both cases the perception and the faith are one and the same, it is manifest that the analogy does not exist till in the latter the faith has been formed, and we cannot bring a man to that faith who says he is devoid of it by alleging a correspondence between its grounds and those of our primary beliefs, which for him does not as yet exist.

So much for Mr. Lowndes' main argument, which, beautifully and instructively worked out though it be, remains to us inconclusive. Our second issue with him is as to the number of our primary beliefs. That, we think, he needlessly swells.

Two quite distinct questions present them-

ghost, and is struck with remorse for his ill-

treatment of the girl who had once loved

him. He rushes accordingly into another

room, tears his wig, and thus discovers his

sex to the virtuous heroine, who happens to

look into the room. The end is, that the Staff-Surgeon, who is a most charming young

lady's ideal, succeeds to the property of the

contrary, the writing is mechanical and commonplace to the last degree—just such, in fact, as any person of average industry could spin out perpetually without any particular exertion. This class of work is no more literature than a Chinese puzzle is art—the most which can be said of it is that it is the result of a certain amount of industry, which would, however, be better bestowed on some more purely mechanical art than in the manufacture of stories for the benefit of those to which waste paper is usually con-

signed.

selves. Are primary beliefs trustworthy? Is such or such an alleged primary belief really one ?-is it a belief at all? On the former of these, we are entirely in accord with Mr. Lowndes. But when he counts among primary beliefs an alleged faith in the substance of a red billiard-ball apart from its qualities, and in the objective reality of space and time, we are constrained to differ. No doubt most men imagine that they have such faith, because they are just as little in the habit of inquiring carefully into what they really think as into what the things around them really are. Now the question of substance underlying qualities is not one which often presents itself to the uneducated mind. No doubt a quality, viewed as a quality, must always be conceived as the quality of something; but if we inspect our ordinary thoughts, we shall find, if we mistake not, that we are, for the most part, content with laying one quality on another, a secondary on a primary—the redness, the smoothness, or the roundness of the billiard-ball on the resistance, the solidity, or the extension. It is only when we think of these latter, and discover them too to be qualities, that we are forced to believe something more, to recognize substance in the background. Not in the billiard-ball itself, for everything material in that is but quality; not in the parent ivory, for all that we know of it is but quality too. Beyond visual observation, behind the utmost chemical analysis, and far back in elementary depths to which we cannot reach, must be that substance, whose existence we grant to be matter of primary belief.

Mr. Lowndes' style is for the most part pure and lucid. How then came such a writer to use the vile word "reliable?"

F. G---N.

THREE NEW NOVELS.

One Against the World; or, Reuben's War. 3
Vols. (Tinsley Brothers.)
Dr. Mills' Marriage, and What Came of It. 2
Vols. (Binns & Goodwin.)
The Staff Surgeon; or, Life in England and
Canada. 1 Vol. (Saunders, Otley, & Co.)

T is a comparatively easy and not unpleasant task to estimate and compare various vintages of good wine; it is by no means easy, and is certainly anything but agreeable, to perform the same office upon various brews of small beer. The latter is, however, the task which falls to the lot of the critic into whose hands are put the three novels the titles of which have just been given. They are all very small beer indeed, though of different brews. It would not, however, be fair to say too much in depreciation of these poor little stories, which are in truth too weakly to bear much censure. They come in the midst of a great flood of novel-writing, and are neither much worse nor much better than the majority of the novels with which they may be classed. The best that can be said of them is, that they are alike guiltless of any ery violent offence against good taste and good feeling—the worst, that they are alike destitute of nature, insight, and strength. There is, indeed, a curious femininity of tone pervading all three, and, were it not that the name of the author of the first is given, it is probable that few who read it would believe that it is not from a lady's hand.

"One Against the World" first made its appearance before the public in a penny weekly paper under its secondary title of "Reuben's War." This fact is not stated, as it should be, on the title-page, so that some unlucky readers may be beguiled into ordering from the circulating library a book which they have already read in another form. To those who read it, however, in the three volumes, it is tolerably evident that the class to which it appeals is not one which gives much attention to the higher forms of fiction. The author has brought out the stock characters of the penny romance, has put into their mouths the customary sentiments, and carried them through incidents of the usual description. We have the "haughty aristocrat" who marries

secretly, repudiates his wife, pays some one else to marry her, and leaves her with his child to struggle through the world as best We have the benevolent but she can. childless squire who anxiously desires a worthy heir to his estates, but who does not love his next-of-kin. There is a choice society of thieves, some of whom love their profession, and talk its slang with much gusto, while one who does not like it uses always the most unexceptionable English, and utters from time to time the most correct moral sentiments. There is the usual virtuous farmer's daughter—a prodigy of beauty, piety, and wit; while, to fill up the story, there are, of course, a wonderfully astute detective, a comic landlord of a village inn, and a rather large number of minor characters, who, being totally independent of the story, might be labelled after the Shakesperian manner— "1st Rogue, 2nd Rogue;" "1st Soldier, 2nd Soldier," and so on. Of course, the virtuous burglar turns out to be the son of the "haughty aristocrat," and heir to the enormous estates of the childless squire; while equally, of course, he marries the beautiful farmer's daughter, and thus vindicates the dignity of the oppressed dangerous classes whom this author would have us believe are more sinned against than sinning. It is a remarkable circumstance, however, and one eminently worthy of further investigation that novelists of the "penny number" class always make their virtuous heroes turn out to be the sons of some one or other of the wealthiest or most anciently descended personages of the story-thus curiously proving how firm a hold the tradition of the value of "blood" has alike upon even the lowest class of writers and readers.

The names of the publishers of "Dr. Mills' Marriage" will be enough to show the experienced novel reader the class to which this story belongs. Messrs. Binns and Goodwin have a speciality for the production of religious novels of a highly Protestant and Evangelical school. To this the present story decidedly belongs. The scene is laid in Ireland, and the interest of the story turns upon the adventures of two girls who are the offspring of a marriage between a Roman Catholic father and a Protestant mother. The latter dies at the beginning of the story, and the father almost immediately marries again. His new wife is of the same faith with himself, and the daughters, who have been brought up by their Protestant mother, are speedily turned out of doors because of their adherence to the faith in which they have been educated. Under these circumstances, one of them makes a stolen match with a wealthy ex-Guardsman and county M.P.; while the other pursues a course of straightforward and unremitting integrity as nursery governess in a noble family. It need hardly be said that everything comes right in the end; the stolen marriage is explained to the family of the ex-Guardsman, and the young wife captivates everyone by her grace, gentleness, beauty, and devotion to her husband. The other sister, who is by far the more pious of the two, marries, as is only proper, a young clergyman of the Irish persuasion; and, as the reward of her virtues, inherits a handsome fortune from the wicked stepmother who has been the cause of her departure from home. The whole story is excruciatingly "genteel," and the reader will find not merely ample opportunities of studying the manners of the superior classes, but a most impressive display of the acquaintance of the authoress with the French and Italian languages, the specimens of which, as here given, are, to say the least, slightly curious. The plot of the "Staff-Surgeon," like that

The plot of the "Staff-Surgeon," like that of the two stories just noticed, turns upon a concealed marriage, which is discovered at last in an intensely absurd manner. The naughty heroine who has been guilty of the marriage visits the good heroine, and has a serious accident. In consequence of her dangerous condition, she sends for her husband, who visits her disguised in woman's clothing. He, meeting in a corridor the sister of his first wife, takes her to be a

THE HIGHLANDERS.

Concise Historical Proofs Respecting the Gael of Alban, or Highlanders of Scotland, as Descended of the Caledonian Picts, with the Origin of the Irish Scots, or Dalriads in North Britain, and their Supposed Conquest over the Caledonian Picts, Examined and Refuted. By James A Robertson, F.S.A. Scot. (Edinburgh: William P. Nimmo.)

INKERTON, the Scottish critic and historian, who flourished in the days of Horace Walpole, and had that statesman and Edward Gibbon for friends, was the first to draw the attention of scholars to the Pictish question—the question whether the Picts were Goths or Celts. His antipathy, however, to the Celtic race in all its branches, whether Scottish, Welsh, or Irish, was too great to admit of the exercise of the judicial function; and with the whole force of his erudition, which was not inconsiderable, he declared for the Gothic origin of the Piets; and with an invective fierce, bitter, unscrupulous, and happily unknown in modern literary controversy, he kicked the poor High-lander and his whole clan to regions Stygian. Nor was he without distinguished aiders and abettors; and Johnson himself pooh-poohed Ossian and the whole of the Celtic claims to recognition.

Something of the feeling has come down to modern times; and while we are continually hearing of "the noble Anglo-Saxon race, we affect to forget, or, at all events, are careless to inquire, how much it owes to the Celtic element. And yet from the days of Geoffry of Monmouth all through our British literature, in Chaucer, and Spenser, and Shakespeare, in spite of the overlying Saxon, Norman, and modern English strata, the primary Celtic is for ever cropping up; and it has been left for our own Poet Laureate to carry out the intention of Milton, and to present to us the Arthurian legends in English verse. And thus the tones of the Celtic harp are still in the air, and the ear opens greedily as in the olden time.

Among modern scholars who have attempted to answer the question, "Who were the Picts?" the late Mr. Garnett occupies a prominent place, and from his great learning, and the calm judicial spirit in which he approaches the question—a spirit anything but familiar to the controversialists of last century—his opinion carries great weight, and to English minds has almost settled the whole point. That opinion is that the Picts were not Scandinavian, as Pinkerton alleges, and whom our own able philologist, Dr. Latham, is half inclined to support, but British or Welsh, and that all the Pictish facts coincide with their being so.

This is one of the notions which our

author, James A. Robertson (an enthusiastic member of the Clann-donnachadh, and a scion of the ancient house of Lude) scouts; but especially does he address himself to uprooting all idea in his reader's mind that the Irish Scots, or Dalriads, had anything whatever to do in influencing the national peculiarities of the Caledonian Gael, either in language, poetry or music, dress or accoutrements. Not only does he regard the annihilation of the Picts by these Dalriads as the most absurd of fables, but he asserts boldly that the Irish - Scotch colony on the Argyleshire coast were far too insignificant in numbers ever to have competed with the Picts in battle; and that upon one occasion, when they had the temerity to do so, they were not only woefully beaten, but were even placed under subjection by Angus M'Fergus, King of the Pictish Gael.

This is rather startling, when we remember that the able advocate and ripe scholar, Sir George MacKenzie, of Rosehauch, whose "Observations on Precedency" were copied by no less distinguished a herald than our own Guillim, tells us distinctly, and quotes many foreign writers for what he says, in his "Blazon of the Achievement of the King of Scotland, Charles II.," that "Fergus took the lion for his arms when he did beat the Picts." His authority says: "Cum Picti in agros Scotorum copias primum ducerent, quibus haud minus cupide, quam strenue obviam ivit Fergusius sublatis signis, et rumpendo ipsorum claustra, assumpsitque Leonem rubeum erectum, aurea facie descriptum, cauda tergum, ut fere mos est, dum se ad pugnam incitat, verberans, eoque generosam iracundiam significans." This same leo rubeus still figures on the current coin of these realms, and on all ensigns armorial of Her Majesty the Queen; but, from what our author tells us, the brute gules has been ramping all these hundreds of years on a golden field under false pretences. And it is thus the word once written remains; but philology and ethnology were unknown to the ancient chroniclers, and even the Venerable Bede must be partaken of cum grano.

If, then, the Pictish Gael, who gave the Romans so much trouble in the early ages of our era, and has been the cause of such bitter controversy in these latter days, was neither a Scandinavian, according to Pinkerton, nor an ancient Briton, according to Garnett, who was he? This is the grand question which Mr. Robertson answers, and after a careful perusal of his book, keeping well in mind the various theories and arguments of his opponents, we cannot help coming to the conclusion that he is perfectly right when he says that these same Picts are our old friends of Killiecrankie fame—the modern Scotch Highlanders-whom our readers will probably see, before the season is over, driving the red deer on the hills of Athole. Mr. Skene, the highest Celtic authority known, agrees with the author in believing the Picts and Caledonians to have been the same people.

Another important, and we think highly probable, conclusion at which Mr. Robertson arrives, is, "that the accession of Kenneth MacAlpin to the Pictish throne was a peaceable one, and in all respects precisely the same as King James of Scotland to the throne of England." He proves also the language of the Picts to be the same as that of the present Highlanders; and has an easy task, with the Dean of Lismore's book before him, in establishing the authenticity of the Ossianic poems, which, for the grand and the terrible, and at the same time the ineffably tender, rank with the proudest productions of the most favoured lands. One can easily understand how a man like Napoleon the First carried his admirable Italian translation of "The Voice of Cona" with him wherever he went.

From the space we have devoted to Mr. Robertson's book, our readers will perceive that we not only attach considerable importance to the subject, but that we regard also very favourably the manner in which it

has been treated. Considering the keen, logical turn of our author's mind, we are rather surprised that he has not thrown his book into better literary form. At all events, the bad punctuation, and the lumbering long sentences, might have been avoided.

We would recommend that in a second edition our author would throw his "Notices of the Highland Clans and of the Country of the Gael" into a fresh volume. They require amplification, and are too interesting and important to be huddled away in a few leaves. He will then, perhaps, give a little of his attention to the ethnological side of the question, so that the Sasunnach may attain at last to something like a true notion of "Caledonia invicta." J. F. R.

SPRING SONGS.

Spring Songs. By a West Highlander. (Macmillan.)

THOSE who are given to look over the railway bookstalls must have noticed, sometime during the last fortnight, a bright green paper cover with a vignette of a lovely young Highland bull, who has broken into a field of oats, and apparently frightened off the reaper, whose sickle lies at his feet. We are informed by-and-bye that he is harmless, or at any rate not intent on mischief to the neighbours, because "his thoughts are on his own Glencoe," which he sees in the distance; but this does not prevent him from munching up with much apparent relish a mouthful of the oats, in spite of the assurance that " no hoarded wealth of yellow grain his soul regards;" nor should we at all like to trust to his absence of mind, unless there was a convenient gate or stone-wall up which to climb in case of need. Below is the motto "Hos ego versiculos feci," which is certainly true in the sense in which boys at Eton and Winchester make that ingenious patchwork of Virgil and Ovid and Gradus which satisfies head-masters. Not without reason does the author inscribe his work to Tennyson, for he is most beholden to him, though Browning, Poe, and several more, have been laid under contribution. In fact, the frontispiece is about the most original thing in the book. What does it mean, this frontispiece ? Fanum habet in cornu is suggested by the way in which the bull is tossing about the oats. His generally vicious look makes us think of the proverb about the black ox and his foot; but all the proverbs that we can remember fail to explain why the West Highlander should be represented as trampling on cultivated oats, instead of doing what is more natural for youthful poets-viz., sowing wild ones. As to plagiarism, it is really better for one of those whom gods and men and booksellers agree in shutting out from the rank of true poets to make good imitations, to be steeped to the lips in the best poetry of his day, than to write bad original verses. Many find an unaccountable pleasure in stringing together feeble rhymes; but only the most conceited, and probably the least meritorious, of the would dare show what they write to friends, if no fifth-rate poet ever published his adaptations or original effusions. Just as saints give us courage by showing what mere men may do, whereas we might else despair of being good, so it is comforting to see to what a steady imitation of the really divine bards may bring the mere poetaster. Our Highlander makes no secret of his obligations to the Laureate. He needed not to tell us that, had not Tennyson written and published, this book would never have seen the light. He has written just what scores of people are writing every year; and if we do not find fault with him for rushing into print, it is chiefly because we are rejoiced to find that Scottish stomachs are able to assimilate such Southern fare as our Laureate's poems. It is a grand thing to say "I imitate Tennyson;" it is like Horace boasting of having introduced the chiefest of the Greek lyric poets to his countrymen; and, after such a general confession, we are not careful to search for borrowings from minor poets. But we must let the bull roar for himself.

This is very pretty, and does not at all try to hide its parentage:—

Bow down once more, and kiss me on the mouth; I must arise and go into the South, While yet the swallow lingers in the South. Bow down, O love, and kiss me on the mouth.

Dearest, I go—but truly death is sure; And though I do not fear that death is more Than love, yet cold and dismal is the shore Which lies between me and the golden South— So kiss me, love, once more upon the mouth.

Dear, let them speak; it will not hurt me there; Nor will their sharp words make our love less fair. Wonderful, excellent, beyond compare Of aught that lies between us and the South— Bow down, my king, and kiss me on the mouth.

And hear me speak one word before I go.

Even if the cool and healing waters flow

Far from the road that leads me to the South,

I am not sorry that I loved you so;

Then kiss me, dear, once more upon the mouth.

Beautiful is the whole poem; though it hardly matches with our author's announcement that he means, like Wordsworth, to tell incidents of common life in common language. How again about this, which magazine readers will hardly have forgotten? Surely it is not common language; if they talk so in the West Highlands, travellers must hitherto have brought a very imperfect report of the land:—

In the land of the West there's a rest,
Where the young birds that die in the nest
Are kept from evil and pain
Till they meet their mothers again;
And then they are carried at even
To the house of our Lord in the heaven—
So they say.
But I know, to my woe,
That Isabel's taken away,
And neither by night nor by day,
In the hay-field, nor yet by the shore,
Do I hear her voice any more.

We are sure our readers will thank us for these two extracts, and will agree with us that no originality which is not of a very high order is so valuable, "for general purposes," as the power of putting together such perfectly musical verses as these. We will not venture after them to quote from any of the less finished pieces; but will merely say that "Victory" and "After the Battle" are touching little poems, and that "My dove-cot," a pretty conceit, is about as unlike "the language really used by men" as anything that can be imagined.

The Highlander fails, as Scotchmen are generally said to do, when he tries to be humorous; his "black sheep," who propounds the very original observation—

That, whether corpulent or slender, Don't matter at all, if the brisket's tender,

makes about the least satisfactory figure in the book. The little volume will, as we said, be an encouragement to beginners in verse-making; showing them that they need not despair. For our own part, we would rather have had some four or five of the "songs" printed, without the rest, in that much-needed volume, "Extracts from Inferior Poets;" but the West Highlander has preferred giving us some eighty-six pages of good, bad, and indifferent. At any rate, he has not set a high price on his performance. Rosamond and Isabel, to say nothing of the twice-repeated bull, are surely worth all the money.

GUIDE BOOKS.

ASCENTS and Passes in the Lake District of England, being a new Pedestrian and General Guide to the District. By Herman Prior, M.A. (Simpkin, Marshall, & Co.)—If we must have Alpine climbers, there is scarcely anywhere such good practice-grounds as our own Lake Districts, and to all who wish thoroughly to qualify themselves to become members of the Alpine Club we can recommend Mr. Prior's volume. It is, as it were, the grammar of hill-climbing, and is full of instruction and advice upon matters which guide-books in general pass over, and which renders it, in some measure, superior

to the many excellent Guides to the Lakes already in existence. Containing, as it does, all the information usually met with in its competitors, the careful description of the ascents and passes of the mountainous district, from Morecambe Bay to the Derwent and the Greta, give it a superiority over them, which mountain climbers will fully appreciate. Besides a general map, there is a small travelling case, containing maps of 1, Windermere and Coniston Section; 2, Ambleside and Ulleswater Section; 3, Keswick Section; and 4, Wastwater Section.

Cassell's Illustrated Guide to the Seaside; comprising all the Principal English Sea Watering Places, &c. (Cassell, Petter, & Galpin.)—This is a little handy-book of 105 pages, illustrated with clever woodcuts, giving, in very few words, just sufficient information respecting each place, as to hotels, churches and chapels, libraries and reading-rooms, means of locomotion, &c., which every one who visits a place for the first time requires to know.

Surrey: its History, Antiquities, and Topography; with an Itinerary for the Tourist. (Cassell, Petter, & Galpin.)—Some years ago Mr. Charles Knight commenced a series of "Journey Books" through England, each county forming a separate volume. After having published Kent, Hampshire, and Derbyshire, the idea was abandoned. Messrs. Cassell and Co. appear to have revived it, and present us with the county of Surrey, much on the same plan, and quite as carefully compiled. The volume consists of 160 pages, and is illustrated with a map and numerous woodcuts.

How to Spend a Month in Ireland. By Sir Cusack P. Roney. (W. H. Smith & Son.)—A most useful manual, full of information as to the means of locomotion, the cost of everything, the best places to go to, what to see and what to avoid, and, indeed, of everything of which a tourist visiting Ireland for a month need have any knowledge. It consists of 168 pages, and has a map and several woodcuts.

Odds and Ends, No. 4 .- "The Enterkin," by John Brown, M.D. (Edmonston & Douglas.)—These Odds and Ends are always welcome. "Convicts, by a Practical Hand," which was the second of the series, and "Wayside Thoughts of an Asophophilosopher," by Professor D'Arcy W. Thompson, the third, have also reached us. Our old friend Rab gives so charming a description of the trip by the 6.20 A.M. train from Edinburgh to the Enterkin, and looking up to the top of the huge Lowthers, 2,377 feet above the level of the sea, takes his friends through the Enterkin Pass, with perpendicular rocks on either side, Thirstane Hill on the left, 1,895 feet high, and Stey Gail, or Steep Gable, on the right, 1,875 feet, in so pleasant and chatty a mood, that the Enterkin, "this very steep and dangerous mountain," as De Foe calls it, is sure to attract many a holiday-seeker from the banks of the Thames, no less than from amongst the dwellers in the good city of Edinburgh, to its summit.

Black's Guide to the Channel Islands. Edited by David Thomas Ansted, M.A., F.R.S. (A. & C. Black.)—One of the most useful of the series of guides published by Messrs. Black of Edinburgh. In 1862 the author, conjointly with Dr. Latham, published a larger work on the "Channel Islands," of which the present volume is an abridgment, with additions and corrections to suit the more immediate requirements of tourists. As may be expected, the antiquity and history, the natural history, climate, and geology, the language, law, and institutions of this interesting group of islands furnish matter for a most instructive introduction of some twentysix pages. To this follows an itinerary; and then the description of each island forms a separate section, the places of interest in each being placed in alphabetical order. These sections are illustrated each with a map and views of the most interesting objects to be met with in the island under description.

Bradshaw's Handbook to Normandy and the Channel Islands; with Notes, Historical, Traditional, and Descriptive. By Herbert Fry. Illustrated with Travelling Maps of the Country. (W. J. Adams.)—Mr. Fry confines his observations on Normandy to that portion which is traversed by the Western Railway of France. Those who can spare a month from business, and wish to visit one of the most interesting portions of France, cannot have a more reliable guide and companion.

Dieppe: The Route by Newhaven. With Illustrations, and Advice to English Travellers on all Requisite Subjects. (J. Booth.)—A concise history of the town and suburbs, with cuts of objects of interest and notice of historic sites, &c.; lists of hotels, with prices; walks, rides, and drives, and similar useful information, fill eighty-eight closely-printed pages. There are woodcut illustrations, and a plan of the town.

The Regular Swiss Round, in Three Trips. By the Rev. Harry Jones, M.A. (Alexander Strahan.)—The first and second trips are reprinted from The Leisure Hour. The third appears here for the first time. For those who go to Switzerland for change of air and for health's sake, who have no ambition to do the Matterhorn, or to spend their summer amid Alpine snows, Mr. Jones's "Regular Swiss Round" is just the book they should secure. It is very nicely got up, and the plates are charmingly appropriate.

Egypt: Chapters from a Lady's Biography. (W. Tweedie.)—Invalids, who intend wintering on the banks of the Nile, will do well to secure this brochure. Many who do not, will gain much information by the perusal of the portion devoted to the Turkish bath.

THE FORTNIGHTLY REVIEW.

The dulness of the season has not affected the quality of *The Fortnightly*. In the current number the articles are varied, and for the most part interesting. There is a mistake committed, however, similar to that in the last number but one, wherein a laudatory review of the works of a contributor appeared almost alongside of that contributor's article. We think it advisable that errors of taste like this should be carefully guarded against in future.

The first article is from the pen of Mr. Lawley, who is understood to have acted as the Southern Correspondent of *The Times* during the American Civil War. It is entitled "The Last "Six Days of Secession," and is written with the vigour and grace for which his letters were re-markable. From this article we gather an adequate notion of what occurred when the Southern Confederacy was in its death throes. It would appear that hunger led to the surrender of the army of Virginia. Had it not been for this, it seems probable that General Lee might have protracted the struggle and gained a temporary success. The following is the account given of what occurred when General Lee returned to his camp, after his interview with General Grant: "Whole lines of battle rushed up to their be-"loved old chief, and, choking with emotion, "broke ranks and struggled with each other "to wring him once more by the hand. Men who " had fought throughout the war, and knew what "the agony and humiliation of that moment must "be to him, strove, with a refinement of unselfish-" ness and tenderness which he alone could fully appreciate, to lighten his burden and mitigate "his pain. Withtears pouring down both cheeks, "General Lee at length commanded voice enough "to say, 'Men, we have fought through the war "together. I have done the best that I could "for you." We can heartly recommend this article for perusal, and may, at the same time, express a hope that its author will favour the public with a history of the war in the South.

Colonel Pelly furnishes a well-written and sensible article on "British India." He points out very clearly the reasons why service in India is regarded by Englishmen with less favour now than formerly. He does not share Mr. Kaye's admiration for the conduct and policy of the late Earl Canning. He remarks that "The "assertion that Lord Canning's was the only "unblanched cheek in Calcutta, is an unmerited "reflection on the community of that capital. "It is notorious that Earl Canning had nothing "whatever to do with the mutiny in its

"critical hour. The wires were cut, and "Sir John Lawrence and the other chiefs had "no resource other than to act independently." Meyerbeer's L'Africaine is criticized with great acuteness by Mr. Hullah. He considers that the final verdict, both of London and Paris, will rank that opera "a little above the Prophète "and a little below the Huguenots." In his judgment, Meyerbeer is not so great a composer as others affirm. Mr. Hullah says: "Whether "Meyerbeer was what is commonly understood " by a man of genius-one who, having got more " or less use of the tools of his art, threw off "beautiful things; not so much without effort, "as because of some controllable impulse within "him-may reasonably be doubted: but that, "by indomitable industry, conjoined with unpa-"ralleled critical acumen, he succeeded in getting "together works monumental alike in their " magnitude and power of endurance, is not to " be denied."

"Home Travel, Surrey," is the title of a very interesting article by Mr. Dennis. It contains some curious pieces of information, and a strong recommendation to tourists to explore our island. Evidently, there are many spots in Surrey to which their steps might well be directed. There is a sneer in this article, which we did not expect to have met with in a Review conducted by a gentleman so unprejudiced and liberal as the editor of The Fortnightly. After being told that Evelyn's grandfather was blessed with two wives and twenty-four children, we read that, "Doubt-"less, the good man believed, in the words of an "old book, which is growing obsolete now-a-days, "that 'children are an heritage of the Lord, "and the fruit of the womb is His reward;" but unfortunately there was no philosopher "then living to tell him of his error, and that "little improvement can be expected in morality "until the producing large families is regarded "with the same feeling as drunkenness, or any "other physical excess." It is a pity that an article so good as this one should be blemished by a passage like the foregoing, which would not have been out of place had it appeared in the columns of the Morning Advertiser.

The other articles, which are solid and instructive, are entitled "Bible Study in the "Fifteenth Century," Part II., by James Gairdner; "How Crime is Investigated in Scot-"land," by W. Chambers; "The Irish Church," by Anthony Trollope; "Housing of the National "Art Treasures," by Philip Gilbert Hamerton; "The English Constitution: No. III. The "Monarchy," by Walter Bagehot. There are the usual review of public affairs, notices of new books, and two chapters of Mr. Trollope's new novel, "The Belton Estate."

Trifles for Travellers. (Murray & Co.)—The author tells us himself that "some fruit must be gathered unripe, to ripen afterwards at a distance," words which may be aptly applied to this volume of essays. These essays are not without thought and purpose; but in their present form they are crude, vague, and unsatisfactory. The catch title is of the lucus a non lucendo class. Travellers, as such, will glean nothing from the book.

Shooting Simplified: a Concise Treatise on Guns and Shooting. By J. D. Dougall. Second Edition, re-written and enlarged, with a Special Chapter on Breech-loaders. (Hardwicke.)—Most opportunely does this second edition of Mr. Dougall's valuable handbook for sportsmen make its appearance. Of a book so well known and so thoroughly appreciated, we have little to add to what has been said before in its praise. Believing that the breech-loading movement has reached a stage at which it will remain for an indefinite period, the author of "Scottish Field Sports" adds a valuable set of instructions for the sportsman in making use of this most advanced of sporting firearms. In its improved state, "Shooting Simplified" will be largely welcomed.

Odds and Ends. No. 3. Wayside Thoughts of an Asophophilosopher. By D'Arcy W. Thompson. (Edmonston & Douglas.)—Professor Thompson is a pleasant companion for a contemplative man. The wayside is the road of life, and the essays, which make up the contents of these thirty-two pages, are: Rainy Weather, or the Philosophy of Sorrow;" "Goose-skin, or the Philosophy of Horror;" and "Te Deum Laudamus, or the Philosophy of Joy." Take from the latter this happy definition of man: "Man was defined very imperfectly by one of the wisest, if not the wisest, of men, as 'the animal with the hand.' Surely this definition would embrace all the ape tribe,

from the gorilla to the marmoset. Had the old philosopher any dim presentiment of Darwinian theories? Whether he had or had not, I think we may safely offer to evolve definition upon definition superior to the one above quoted; such as will confound us as little with the hippopotamus as with the orang-outang. Man, then, may be defined as the animal that protects itself against the wet or cold or heat by artificial covering; or, that uses fire to prepare its food; or, that drinks fermented liquors; or, that smokes tobacco; or, that beats its young systematically for educational ends; or, that blows its nose; or, that laughs. And, although all these definitions are good, I hold the last to be the best of all; and I am sure that no candid judge will consider it as including the hyena or the Australian jackass."

Hunting Sketches. By Anthony Trollope. Reprinted from The Pall Mall Gazette. (Chapman & Hall.) - These admirable sketches are too fresh in the memory of most of our readers to make it necessary for us to say more of them than that the getting up of the volume, as regards paper, print, and binding, marks them as intended to occupy a permanent place in the literature of the day. "The Lady who Rides to the Hounds," and "The Hunting Parson," are both charming and clever pictures in their way. both charming and clever pictures in their way.

The Apiary; or Bees, Bee-Hives, and Bee Culture. By Alfred Neighbour. (Kent and Co.)—This valuable manual is, what it professes to be, a familiar account of the habits of bees, and the most improved methods of management. with full directions adapted for the cottager, farmer, or scientific apiarian. The writer is a regular enthusiast, but an enthusiast whose practical knowledge of the subject is made all the more available to the reader from the very enthusiasm which, as in Virgil, leaves not the most minute instruction untold. Nobody can write about bees without quoting poetry, and Mr. Neighbour does this largely, yet most aptly.

A Handbook of British Plants: Designed especially for Schools, Science Classes, and Excursionists. By W. Lowndes Notcutt. Longman & Co.)—A very compact and useful manual of British botany, by Mr. Notcutt, of Cheltenham, containing descriptions of all known British species of flowering plants and ferns, arranged on an analytical plan, which greatly facilitates the making out of the plant, the knowledge of which is sought for in its pages. Sea-side visitors and tourists will find this a most useful manual in the pursuit of hedge-row, way-side, and field botany.

The Children's Garden, and What They Made of it. By Agnes and Maria E. Catlow. Illustrated by Mrs. Henry Criddle. (Cassell, Petter, & Galpin.)—One of Messrs. Cassell and Co.'s admirable series of books for the self-instruction of children, in the form of a running story, illustrating garden-work for each month in the year, and inculcating at the same time a due regard to the social duties of life, from childhood

Under the Waves; or, the Hermit-Crab "In Society." By Annie E. Ridley. (S. Low & Co.)-This is one of the best books we know of to place in the hands of young and intelligent persons during a visit to the sea-side. In the course of his travels and adventures, the hermitcrab is brought into contact with all that interesting animate life below the waves, which we like to gather around us in our marine water-vivaries-zoophytes, molluscs, crustacea, annelidæ, &c. Each in turn is made to tell of its habits and food; and, as all these particulars are carefully gathered from the writings of Charles Kingsley, Lewes, Gosse, Harper, and others, to which the writer adds much from her own experience, and the story is prettily told, the book will be sure to open up a new field of enjoyment, such as, when once entered upon, will scarcely fade away in after life. It will make the study of natural history, by the handling of the living specimens themselves, a most enjoyable pursuit, and a pic-nic exploring party of young naturalists, like that which forms an elegant coloured frontispiece to the volume, a thing to be coveted.

The New Parliament. The Shilling House of Commons. By Edward Walford, M.A. (Hard-wicke.)—To the former particulars of parentage, birth, marriage, station, appointments, &c., of each member, there is now added the number of votes polled by each at the late election, which gives a statistical value to this useful

little manual which its predecessors did not

THE Rev. H. H. Wood has recently published, in the form of a small pamphlet, a letter addressed by him to Professor Phillips on the theory of development and the antiquity of man. Mr. Wood, in this letter, most frankly and fairly examines Darwin's theory, which he believes possesses "far more of the ghastliness of lifeless speculation than the beauty of living truth." Though there are many of our readers who will dissent from this, yet we welcome all discussion on the subject, when carried on as by Mr. Wood; for truth can never be attained until the errors which may lurk on either side are pointed out by opponents. Mr. Wood mentions an interesting case, in which he was to examine the offspring of "a moth which had apparently reached the ex-treme limits of variation in species. It would rightly have been considered an important case by Darwinites, if the result of the new generation had been another species. But the would-be crucial test failed, the offspring of this moth reverted at a single bound to its original form."

A Popular History of America, from the Discovery by Columbus to the Establishment of the Federal Republic of the United States. By Elizabeth Cooper. (Longman & Co.)—This is a useful text-book of American history up to the year 1787, carefully compiled and divided into three sections: 1. The Discovery and Conquest of the West Indies and South America; 2. The Colonization of the United States; and 3. The War of Independence and Establishment of the Federal Government in 1787.

A Familiar History of the United States of America, from the date of the Earliest Settlements down to the Present Time. By J. H. Siddons. (Darton & Hodge.)—A concise text-book, giving a general survey of the origin, rise, and progress of the United States up to the taking of Richmond and the suppression of negro slavery, which will enable the reader to form a far more correct opinion on American affairs than can be done without a similar text-book.

Stocqueler's Familiar History of British India, from the Earliest Period to the Present Time. Tenth thousand revised and brought down to 1865, by James H. Siddons. (Darton & Hodge.)—This capital text-book for the use of candidates for the Civil Service of India Examinations is brought down to the present year by the editor. Concise and clear, it omits nothing which can interest the general reader.

Arundines Cami, sive Musarum Cantabrigien-sium Lusus Canori. Collegit atque edidit Henricus Drury, A.M., Archidiaconus Wiltonensis, Editio Sexta, curavit Henricus Joannes Hodgson, A.M. (Deighton, Bell, & Co.)-In a short preface the editor pays a passing tribute to the memory of Archdeacon Drury. That this most agreeable volume of modern Latin and Greek poetry should have reached a sixth edition is satisfactory proof that the Genius loci on the classic banks of the Cam has found worthy successors to the great trio of Porson, Parr, and Burney, who shed such lustre on the University of Cambridge at the commencement of the present century. The editor adds In Memoriam, an elegant version of Tennyson's :-

"I leave thy praises unexpressed,"

of which we give the first verse :-Lenire curas Musa potens graves Non, care, laudes eloquitur tuas: Quanto refulgeres honore Tot gemitus lacrimaeque testes.

Chloroform: its Action and Administration. A Handbook. By A. E. Sansom, M.B. Lond. (John Churchill & Sons.)-Mr. Sansom, who has had a lengthened and varied experience in the administration of chloroform, has embodied in this volume the results of that experience. He commences his work with some brief but interesting chapters on the discovery of chloroform, with the influence which that discovery exerted by reducing the average of mortality in cases where amputation had to be performed. The most valuable part of the work, however, to professional readers, is that portion of it which is devoted to a detailed examination of the best methods of administering this anæsthetic, together with its practical application to surgical cases. Mr. Sansom very fairly states the danger attendant on the use of chloroform in certain instances; but he has clearly shown that that danger may be reduced to a minimum, if caution

and discretion be employed in its administration. We can recommend Mr. Sansom's work as a brief but scientific manual, which is worthy of a place in the shelves of medical men, and especially of those who are qualifying themselves for the future practice of medicine. Our readers may not be aware that two new anæsthetics were proposed at the last meeting of the British Medical Association by Mr. Nunneley, who suggested the use of chloride of ethylene, and bromide of ethyl as being entirely free from danger in their administration.

WE have received another of Mr. Hardwicke's excellent and cheap publications, entitled "British Hepaticæ, or Scale-mosses, and Liver-worts," by Mr. C. Cooke. It is perfectly unique in character and price; as far as we can judge, an accurate and complete description is given of our scale-mosses, liver-worts, and crystal-worts, ac-companied by 200 illustrations, and all for fourpence. Any one wishing to obtain concise information upon this interesting, but littlestudied subject, will do well to possess them-selves of this brochure. As a book of reference, it will be invaluable to nature-loving tourists, and it will certainly be found in our coat-pocket on our next country walk. A more elaborate work on mosses, by Dr. Carrington, will shortly be published by Mr. Hardwicke.

PUBLICATIONS OF THE WEEK.

Alford (Hy., D.D.). Greek Testament: with a critical revised text: a digest of various readings: marginal references to verbal and idiomatic usage: prolegomena, and a critical and exegetical commentary. In 4 Vols. Vol. 2. New Edition. 8vo, cl., pp. viii.—723. Rivington. 24s.

Aunt Louisa's London Toy Books. A Apple Pie, &c., with Coloured Illustrations. 4to, sd. Warne. 1s.

Aunt Mavor's Little Library. Our Kings and Queens; or, the History of England in Miniature, for the use of Children. With Forty Illustrations. 16mo, sd., pp. 47. Routledge & Son. 6d. Plain; 1s. Coloured.

Bedell (G. T., D.D.). The Basket of Flowers; or, Plety and Truth Triumphant. 18mo, cl., pp. viii.—149. Routledge &

Bigg (H. H., Assoc. Inst. C.E.). Orthopraxy; the Mechanical Treatment of Deformities, Debilities and Deficiencies of the Human Frame. A Manual. Post 8vo, cl., pp. xxii.—700. Churchill. 10s.

Charchill, 10s.

Black's Guide to the Duchy of Cornwall. With Map and Illustrations. 12mo, cl., pp. vi.—397. Black. 2s. 6d.

Burr (Isaac). The Liberty of Teaching Vindicated: reflections and proposals on the subject of Irish National Education; with an introductory letter to the Right Honourable W. E. Gladstone, M.P. Post Svo, cl., pp. xxxi.—173. Simpkin. 2s. 6d.

CLARKE (Charles). Charlie Thornhill; or, the Dunce of the Family. A Novel. 3rd Edition. 12mo, bds., pp. x.—388. Chapman & Hall. 2s.

(Louisa Lane). The Common Seaweeds of the British Coast and Channel Islands, with some insight into the Microscopic Beauties of their Structure and Fructification. With Tinted Plates. 12mo, bds., pp. vi.—140. Warne. 1s.

Tinted Plates. 12mo, bds., pp. vi.—140. Warne. 1s.

Cowper (Wm., Esq.). Poetical Works, with Photographic Frontis
piece. 12mo, cl., pp. viii.—378. Nelson. 3s. 6d.

Darr (J. H., M.A.). The Iliad of Homer, in English Hexameter
Verse. 8vo, cl., pp. xii.—556. Longmans. 2ls.

Davis (W., B.A.). Complete English Spelling and Dictation
Book, for Home and School use; containing, in Graduated
Spelling Lessons, a Systematic View of all the Difficulties and
Irregularities of the English Language; with Copious Dictation, Transcription, and Reading Exercises. 12mo, cl., pp.
134. Longmans. 1s. 6d.

Junior English Spelling and Dictation Book

Junior English Spelling and Dictation Book, containing Lists of all Common Words in the order of their Difficulty; with copious Dictation, Transcription, and Reading Exercises. 12mo, cl., pp. 66. Longmans. 9d.

Senior English Spelling and Dietation Bock; being the advanced half of the "Complete" Book, for the use of Senior Scholars. 12mo, cl., pp. 68. Longmans. 9d.

English (Rev. W. W., M.A.,). An Elementary Treatise on Moral Philosophy for Students, and specially adapted for use in Theological Colleges. 12mo, cl., pp. vi.—172. Rivingtons.

4s. 6d.

Eurifides Phenissæ and Medea, construed literally, and word for word, by Rev. Dr. Giles. 18mo, sd., pp. 212. Cornish. 2s. 6d.

Glen (W. Cunningham, Esq.). Villiers' Union Chargeability Act, 1865, with an Introduction and Commentary; also the practice of Poor Removals, adapted to the removal of Union Poors. 12mo, cl., pp. xii.—150. Shaw & Son. 4s.

Goldsmith (Oliver). Deserted Village, with Notes on the Grammatical Analysis of the Sentences, and a brief Sketch of the Life of Goldsmith, by C. P. Mason, B.A. 12mo, sd., pp. 34. Walton & Malberley. 1s. 6d.

Haughton & Rev. T., M.D., F.R.S.). Manual of Geology Galbraith and Haughton's Scientific Manuals. 12mo, cl., pp. xii.—300. Longmans. 6s.

Heffernan (D. E.). The Pictorial Hand Book of the County of

Herreman (D. E.). The Pictorial Hand Book of the County of Wicklow, containing New and Accurate Engravings of its Scenery, and all the Information required by Tourists, with a large Plan of Wicklow and surrounding Country. 2nd Edition. 12mo, cl. sd., pp. 64. Simpkin. 2s. 6d.

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Hurrs on Shooting and Fishing, &c., both on Sea and Land, and in the Fresh-water Locks of Scotland; being the Experiences of Christopher Idle, Esq. 12mo, cl., pp. ix.—354. Longmans.

James (W.) and Mole (A.). Dictionary of the English and French Languages, for general use; with the Accentuation and a Literal Pronunciation of every word in both Languages. Com-piled from the best and most approved English and French authorities. 7th Edition. 12mo, bds., pp. 428. W. Allan &

Authorities. 7th Edition. 12mb, bds., pp. (W.) and Guis. Grassi. Dictionary of the English and Italian Languages, for general use; with the Italian Pronunciation and the Accentuation of every word in both Languages, and the terms of Science and Art, of Mechanics, Railways, Marine, &c.; compiled from the best and most recent English and Italian Dictionaries. 4th Edition. 12mo, bds., pp. vi.—456. W. Allan & Co. 6s.

Kingsron (W. H. G.). Antony Waymouth; or, the Gentlemen Adventurers: a Chronicle of the Sea. Illustrated. 16mo, cl., pp. viii.—27l. Warne. 3s. 6d.

Lawson (Wm.). Young Scholars' Geography. 12mo, sd., pp. viii.—72. Philip. 6d.

Lyon (George, F.G.S.E.). Sketch of the Geology of Scotland, with coloured Map. 12mo, cl. sd., pp. 24. Simpkin. 1s. 6d.

Mausmall (Emma). Roger's Apprenticeship; or, Five Years of a Boy's Life. Fsep. 8vo, cl., pp. 131. Jarroid & Son. 1s. 6d.

Morant's Twelfth Mass in G, in Vocal Score, with accompaniment for the Organ, Harmonium, or Planoforte. 4to, sd., pp. 82. Boosey. 1s.

Panss's Prayer Book (The). 3rd Edition, revised and enlarged. 12mo, cl., pp. viii.—179. Masters. 4s. 6d.

Pussy Cat. Post 8vo, cl. sd., pp. 43. Rivingtons. 1s.

Russell (W., LL.D.), Eccentric Personages. 1 Vol. post 8vo, cloth, pp. 372. Macwell. 6s.

Sandars (Thomas Collett, M.A.). The Institutes of Justinian, with English Introduction, Translation, and Notes. 3rd Edition, 8vo, cl., pp. 606. Longmans. 15s.

Stanley (Edward, F.R.S.). A Familiar History of Birds. New Edition. 12mo, cl., pp. xiii.—440. Longmans. 3s. 6d.

Strevens (Abol), LL.D. The History of the Religious Movement of the Eighteenth Century called Methodism; considered in its different Donominational Forms, and in its general relation to Protestantism. Carefully revised; 3 Vols. in 1. Roy. 8vo, cl., pp. ii.—425. Watson. 12s. 6d.

Walford (E., M.A.). The Shilling House of Commons for 1865 (11th Year of Publication); a List of the Members of Parliament, and of the Places which they Represent. 32mo, sd., pp. xiv.—196. Hardwicke. 1s.

Wynns (Mrs.). A Life in a Love. A Novel. 2 Vols. Post 8vo, cl., pp. 57. Realize. 21s.

WYNES (Mrs.). A Life in a Love. A Novel. 2 Vols. Post 8vo, ol., pp. 587. Bentley. 21s.

ZETETIC Astronomy. Earth not a Globe: an Experimental Inquiry into the True Figure of the Earth, proving it a Plane, without Aerial or Orbital Motion, and the only Material World in the Universe, by "Parallax." 12mo, cl., pp. iv.—221. S. Hayward (Bath). Simpkin, Marshall, & Co. 3s. 6d.

WHITE'S LATIN-ENGLISH DICTIONARY.

The following extracts from a letter from Mr. White have been handed to us for publication. Had the letter been sent to us by Mr. White, we should most readily have inserted it. That he has taken a less direct course of forwarding it to us is owing, we must suppose, to his being unaware of the willingness of The READER to give a hearing to "both sides."—ED.]

"The article which appeared in the last number of THE READER, on my Abridgment of White and Riddle's Dictionary, has been brought under

Passing over, for the present, all reference to other matters, I will at once proceed to reply to the strictures on my work in the order in which

1. It is objected, that passages from the Digests and Grammarians are almost wholly omitted; and a quotation is given from an old writer—of whose works fragments alone are found, and that mostly, if not wholly, in glossaries—which it is said I ought to have inserted, as affording the primary meaning of the word confuto.

Now, a reference to the preface of my "Abridgment" will show that my work is intended for "students, not travelling out of the ordinary course of reading." And I imagine that no person would assert that the Digests and Grammarians are ordinarily read.

But beyond this. The wording of the stric-ture leads to the inference, as it appears to me, that the primary meaning of confuto is omitted in the "Abridgment." This, however, is not the case. The meaning is given at the beginning of the article as the proper one; and it is at the same time inserted between brackets, to show that it does not occur in authors commonly studied. The quotation, though not here given,

is to be found in my larger work.

2. In the next place, it is said that convenio, in the sense of sue, proceed against, is ignored, though very common in law writers.

Again I refer to my preface, which distinctly states that, in my Abridgment, I have not con-templated the exposition of writers of this class; for these, most assuredly, do not form a portion of the ordinary course of reading. In my larger work, however, they are cited and explained.

3. It is further said that no allusion is made to delego in the sense of assigning a debt.

Now, delego by itself never means to assign a debt. It means simply, in this aspect of its power, to assign or make over. And a reference to my Abridgment will show that these very terms are supplied.

4. Then the writer of the article proceeds to say, "Even the law of the XII. Tables is ignored, though such short sentences as adversus hostem

eterna auctoritas, 'title always good against a stranger,' exhibits two early meanings at once."

The foregoing passage, with its interpretation in words equivalent to the above rendering, though not identical with it, will be found in my larger work at the end of several quotations advanced in support of the meaning, right of possession, legal ownership. Such meaning is also supplied in my Abridgment. But as an abridgment cannot contain all the matter comprised in the work on which it is based, I have quoted only one confirmatory passage—a passage from Cicero, which in the larger work stands first in the list of quotations.

5. The article next proceeds as thus: "And

here we may correct a very prevalent error of dictionaries, which, by the way, has the odd sanction of Lord Cranworth (in Barlow v. Osborne) in the House of Lords, that auctio is derived from augendo, in the sense of increasing the price, because the highest bidder is the pur-chaser. If so, then auctor would be the buyer, whereas it always means the seller, the person who can give title; and auctio is simply an au-thoritative sale."

The foregoing dictum of the writer of the article, as far as auctio is concerned, I more than question. Auctor, indeed, has, in a derived force, the meaning of owner, and then seller. And this point is noticed by my Abridgment. But most assuredly auctio is not derived from it, neither does it, either directly or indirectly, obtain a meaning from it. The only thing in common between the two words-auctor and auctio —is the root aug. Dictionaries and Lord Cran-worth are, I hold, alike right in deriving auctio from augeo. Auctio, in its proper sense, signifies an increasing; and with reference to sales is used in the especial force of an increasing of price; hence, an auction. And that this is the case is proved by the fact that an officer attended public sales for the purpose of awarding the several articles, submitted to competition, to the highest

6. I am next blamed for omitting passages in which explanations or definitions of words are given by Latin authors themselves; and then the words matrona, exhibeo, mancipo, mancipium, are given as affording instances of this so-called neglect.

True, the explanatory passages, though cited at length in my larger work, do not occur in the Abridgment. Still the value of the passages is

Abridgment. Still the value of the passages is found in the English meanings. Moreover, it is not in harmony with the general plan of my book to quote such writings as those of Gellius, Ulpian, or Gaius. And further, the writer of the article has gone out of his way to make this attack, inasmuch as not even in the "Andrews'-Freund," to use his own expression, is any explanatory passage given from any ancient author under the article mancipo. The elucidation of that word, in the way he means, occurs under

7. Another source of invective is that I have called particular phrases, particular phrases. That, however, the several expressions noticed under iter are particular phrases neither the writer of the article nor any one else can disprove.

8. A still further cause of disparagement is sought in the statements I have made of the constructions of the various passages cited under

What fault there can be here I am wholly at a loss to imagine. I hold that nothing which tends to elucidate the structure of the language is useless in itself, or uselessly mentioned.

And here I have to thank the writer of the article for pointing out to me that I have here and there given the word "Relative" instead of the word "Interrogative." This can easily be

9. I will now quote the very words of the article itself: "Except in some more or less doubtful etymologies taken from Pott, &c., the editor appears to be little acquainted with recent criticism—e.g., reddita being given from Lucretius, with a reference to Forbiger; dignus being calmly represented to take a genitive, without any notice of there being but one instance known; no mention being made that the feminine and plural of quisquam are all but non-existent."

But the case stands thus: I have referred, and I trust with advantage, to the works not of Pott alone, but of several eminent men, whose names are mentioned in the Preface to my Abridgment, and whose authority, be it added, is considered by most scholars to stand very high. Then as to reddita, with reference to Forbiger. Forbiger's edition of Lucretius is used and that extensively. This being the case, reference is made-and rightly, I hold-under the article reddo to a note of that editor, with respect to the quantity of the i in reddita, in a particular place; that the word is there to be pronounced not reddita, but reddita. Then, as to a genitive occurring only once after dignus. This can hardly be said to be the case; for, in addition to the passage which I have quoted, there is another also in Plautus, where some editions give the genitive (salutis), while a late one gives the ablative (salute). And as to the so-called omission about certain parts of quisquam, the writer will not find anything said respecting it even in those dictionaries which he estimates above mine.

10. With regard to jus-jurandum; the primary meaning of the word ought to have been given a right to be sworn to, not, as printed, a thing to be sworn. But when this correction has been made, I prefer my interpretation of the word to

11. "We have the blunder of supposing audire to govern a dative, because of the use of dicto audiens."

Not so. If the writer will look at the passage cited in my Abridgment, he will find there a dative of the person also ; and in censuring me, he ought not to have passed that dative over. For that a dative of the person occurs after audio is proved by the following passage from Appuleius (Apol. 83): "Improbo ac nefario homini ne auscultarent, sibi audirent," and this. passage is briefly given in the larger work.

12. Once more, to quote the words of the article: "Messrs. Andrews, Smith, and White all leave untouched the absurd derivation of præstino from præs. Lindemann pointed out, and destino and obstino might have reminded them, that præstino is præstano, 'fix beforehand ;' stano being a transitive, but obsolete, derivative from sto,"

Andrews and Smith do certainly give præs as the certain origin of præstino. I have not done so. I have stated that the etymology is uncertain, though the word is usually referred to præs as its source. And I am still in doubt about the word. I am by no means prepared, at present, to accept Lindemann's statement, nor the writer's interpretation.

So much for the attack of my Abridgment. As to the larger work from which my Abridgment is made, the writer's assertions respecting it are so utterly at variance with facts, that I should have passed them over, as well as the tone he has chosen to adopt, and the animus he has displayed, as alike unworthy of notice, had it not been for the reference made to Professor Max Müller's "eulogium." That eminent scholar has, I am pleased to say, commended my work for a particular feature in it—a feature which would not have been singled out for especial mention had it been found elsewhere. To question what he has said seems to me to be tantamount to affirming either that he is incapable of forming a just estimate, or that he is a mere partizan. He, however, is not by any means the only one amongst scholars of high standing and repute who has commended the result of my labours. And this my assertion is, as you well know, supported by numerous letters.

"J. T. WHITE."

MISCELLANEA.

WE believe the following will be found a complete list of the candidates for the Chair of Rhetoric, now vacant in the University of Edinburgh, in consequence of the death of the late Professor Aytoun. Professor Masson, of University College, London, editor of Macmillan's Magazine, and the author of "Essays," "Life of Milton," and the lately published "Recent British Philosophy;" Mr. E. S. Dallas, author of "Politics," who is also one of The Times' critics; the Rev. Dr. Hanna, a Free Churchman, author of a life of Dr. Chalmers; Mr. G. Mac-Donald, author of "David Elginbrod," "Alec-Forbes," and other novels; Professor D. Wilson, Toronto, a distinguished archæologist, and author of Prehistoric Annals of Scotland; and Mr. John Skelton, an Edinburgh advocate, who writes in Fraser. Professor John Nichol, we are SIDIV T didate. Mr. A. Smith has, it would seem, informed, may resent himseir withdrawn his name from the list.

ALL who are interested in ocean telegraphyand who at the present moment is not?—and have read Dr. Russell's diary of the Great Eastern's noble attempt to accomplish her task, will doubtless be anxious to learn somewhat more on the same subject from another eyewitness. This more will be afforded them in the forthcoming number of Macmillan, in the shape of extracts from a diary kept by Mr. John Deane. The article will be illustrated by facsimiles of the lithographic charts prepared on

THE South Kensington Horticultural Gardens will be thrown open free to the public to-day, being the anniversary of the late Prince Consort's birthday.

Amongst the list of honorary doctors' degree, conferred by the University of Vienna at the recent jubilee, we find the names of Mr. John Stuart Mill, Sir Charles Lyell, and Sir Roderick Murchison.

We learn from an American paper that the planters in the Mississippi Valley have been, and are still, suffering severe loss by the death of

horses, mules, cattle, and hogs, by a singular disease, which is carrying them off in great numbers. In the early part of the summer an incredible number of black gnats made their appearance in the valley, and attacked not only cattle and horses, but also birds, wild turkeys, deer and other game, with such ferocity as to kill, in a short time, quite a number of animals. After the disappearance of the gnats a disease, broke out among the cattle, horses, and hogs, and has been raging for some time, and is still prevailing, though the indications now are that the epidemic—for such it appears to be—is abating. This disease resembles very closely erysipelas, the attacked animal swelling up, sometimes under the breast, at other times on the side, but more frequently under the throat, and dying generally in from twenty-four to forty-eight hours after being attacked.

In the spring of 1864, Mr. Hardinge, a member of the Royal Irish Academy, discovered a number of MSS. in a box at Lansdowne House, Berkeley Square, which constitute the earliest known census returns of the people of Ireland. From internal evidence and the presence of a date on one leaf, he refers these MSS. to the year 1659, and believes that they were known to Sir William Petty. The box was super-scribed "MSS. of Sir William Petty's Survey of Ireland, and other documents relating to Ireland." These MSS. consist of a townland census return, arranged in counties, baronies, and parishes, and even in cities, parishes, and streets, with great particularity. Unfortunately, five of the counties have been lost, and two others are imperfect. By calculations, however, based on the principle of proportion, Mr. Hardinge supplies these defects in the summary of population, and brings out the total number of inhabitants in 1659 as 500,091. Heretofore it has been assumed that in 1672, when a census was taken, based on the number of hearths rated and registered for taxation purposes, the population of Ireland was 1,320,000; but had this been so, the natural increase would have been sufficient to produce a much greater number than 6,800,000, which was the total of 1821, when the first regular census of a recent date was made. On the assumption, however, that the inhabitants numbered only 500,000 in 1659, the natural increase would have about led to that result. It appears, too, from those MSS. that in 1659 the proportions of Irish and of English and Scotch, in Ireland, were as 5 to 1-10 to 1 in Munster and Connaught, 5½ to 1 in Leinster, and 1½ to 1 in Ulster. The documents also contain interesting baronial and city lists of the principal inhabitants, under the Anglo-Spanish designation of Tituladoes. Mr. Hardinge compiled an elaborate compendium of this Census MS., and now prints as a tract his analysis of its contents. The Royal Irish Academy have had complete certified copies made, and deposited in

THE new Parliament contains a larger number of persons brought up at our Public Schools than any one since the passing of the Reform Bill. According to Mr. Walford's "Shilling House of Commons," there are: Etonians, 138; Harrovians, 61; Old Wykehamists, 16; Rugbæans, 28; Old Westminsters, 23; Carthusians, 10; Merchant Taylors', 1; Shrewsbury, 5; St. Paul's, 1—making a total of 283, or rather more than two-fifths of the whole.

Dr. Pusey is said to have in the press a formal reply to the letter which Archbishop Manning recently addressed to him on behalf of Anglo-Romanism. From what we learn of its contents, says The Church Times, it will be almost as remarkable a work as the "Apologia" of Dr. Newman. It will contain, we are informed, not only a personal defence of Dr. Pusey's position and policy, but a full and complete vindication of the catholicity of the Church of England. Dr. Pusey will address the letter formally to Mr. Keble, preferring this to entering into personal controversy with Dr. Manning.

The old game of balloon, mentioned by Burton under that name, a kind of tennis, is being revived as "Pallone," and has found its historian in Dr. A. L. Fisher, in a thin royal octavo volume recently published by Messrs. Bell and Daldy. It is a pity to change once-established names, more particularly when they have become dictionary words. In the report of the sale of Lord Charlemont's library in last week's Reader, an extract is given from a very rare little work, entitled "Rodmontados," published in 1610, and of which only two copies are known, in which the game of "Balloune" is mentioned, and that term applied to the ball used. Balloon-ball, as a game, is described in Strutt's "Sports and

Pastimes," and both as a ball and as a game, similar to tennis, the word Balloon will be found in its place, in Worcester's Dictionary. Dr. Fisher's "Game of Pallone" is elegantly got up and illustrated with fourteen plates, and, no doubt, may serve to re-introduce balloon-ball into our athletic sports and games.

A VERY strong opinion has been expressed by the governors of Charterhouse School, in reply to a circular issued by the headmaster, in favour of the removal of the school from its present site near Smithfield into the country, and a committee of governors has been appointed to consider the matter. The committee have just visited the property belonging to the Charterhouse at Hallingbury, near Great Dunmow, Essex, and it is not improbable that the school will soon be removed there.

MESSRS. SAUNDERS, OTLEY, and Co., will publish shortly a new volume of essays, entitled "Thoughtful Elements," by One of the People.

Mr. Steel has just finished a full length statue of the late Mr. Wilson, Indian Finance Minister, which is to be placed in Calcutta.

A SPECIMEN of the Silene dechotoma has been found growing wild near Painswick, Gloucestershire. It is indigenous in south-eastern Europe, and must have been introduced accidentally.

The Literarisches Centralblatt, No. 33, gives an impartial and, on the whole, a favourable review of Taine's "Histoire de la Littérature Anglais;—the Morgenblatt für gebildets Leser, No. 32, continues its papers on Cricket and Ball-Play;—the Blätter für literarische Unterhaltung, No. 31, reviews Vambery's Travels;—the Europa, No. 33, has "Eine Sommerreise am Senegal," and "die New Yorker Feuer-Zuaven;" the Serapeum, a paper on the productions of the Elzevir Press by F. L. Hoffmann; and Hints for the Restoration of the paper of decaying MSS. by Burkhardt;—the Ausland, No. 31, "Klimatologische Bilder aus Indien und Hochasien," and the Introduction of European Animals and Plants into New Zealand;—the Natur, No. 30, a second paper on Oyster-culture;—and Aus der Natur, No. 29, "Coal in Spitzbergen."

Mr. Bertram's "Harvest of the Sea," in addition to giving an interesting essay on fish life and growth, will contain copious statistics and details of the various British and foreign sea fisheries; as also an account of the natural and economic history of the oyster and other shell fish; a description of the herring harvest; plans and drawings of the great French piscicultural establishment at Huningue; the salmon nursery at Stormontfield; the mussel farm in the Bay of Aiguillon; and other interesting scenes connected with fish culture, including the great eel farm of Comacchio. The work will be illustrated by Whymper, and published early next season by Mr. Murray.

Albemarle Street.

Amongst publications at Auckland, New Zealand, there is The Colonist's Family Herald, a weekly periodical, similar in contents to its London namesake; "Phasmota: Visions and Ghost Stories, in Verse, by the Rev. John Duffus, M.A.;" "The New Zealand Farmers' Guide: to which is appended a Gardener's Chronicle for each Month in the Year;" and "A Map of the Province of Auckland, with the Boundaries of each Block and Parish marked, and Names of all the Principal Places in the Province," &c. We have received No. 28 of The Southern Monthly Magazine, published by Messrs. Upton and Co., of Auckland, which continues to be alike creditable to the literature and press of the colony.

Mr. G. A. Sala will deliver three lectures at Glasgow, towards the close of September and the first week of October, on "Three Phases of Civilization: the United States, Mexico, and Algeria." Knowing, in common with the rest of newspaper readers, that Mr. Sala had recently been photographing the people of America "in the midst of war," Mexico, and Algeria, the directors of the Glasgow Athenæum ventured to suggest those countries as the subjects of the lectures. This was readily agreed to, with the addition of the general title given above. We understand that these lectures are to be delivered exclusively in Glasgow.

LAST Wednesday week, the carpenters' workshops at Eton College were destroyed by fire. The Rev. S. Hawtrey's mathematical school had a narrow escape, being only separated by a small passage.

THE tower, the only remains of the old Castle of Rouen, is connected with the history of Joan of Arc. It was in that building that she underwent several examinations, when there were

exhibited the instruments of torture with which she was menaced. A project has been set on foot at Rouen to purchase the tower by a national subscription.

According to a telegram published on Monday, the waters of the Mediterranean mingled with those of the Red Sea on the 15th instant, the Emperor's fete-day, on which day the floodgates were opened, and a vessel, laden with coal, passed from the former to the latter. The fact was telegraphed to the Emperor Napoleon at the Châlons, and his Majesty despatched a congratulatory reply to the Company. It appears, however, that the telegram has no reference to the Suez Canal itself, as is shown by the following letter which appeared in The Times on Thursday last: "Sir,—The announcement in your telegraphic news of the 21st inst., that 'The Suez Canal had been opened on the 15th, and that a vessel laden with coal had passed from the Mediterranean to the Red Sea' is sure to mislead many of your readers. You may inform them, on the authority of a recent visitor to the works of the canal, that certainly for a couple of years the canal proper will not be opened, and that to which the telegram refers is simply a fresh-water canal fed from the Nile, but having only from three to five feet of depth. This fresh-water canal was nearly completed when the scientific commission visited the works in the early part of this year."

"THERE will be no lack of employment, as public works on a considerable scale will be undertaken in the districts where the settlers will be located; and until work is available in the ordinary course of country industrial occupations, the surplus labour of the districts will be employed on such works." This was the bargain made by the late New Zealand Government, on the faith of which a great number of immigrants went out to the Waikato settlement. It appears that many of these de-luded people are almost starving. The New Zealand press calls loudly on Mr. Weld, the new minister, to do something for them—at any rate, to put them on their plots of land at once; and, while he lets them work half time on their own ground, to give them partial employment on public works. There surely are plenty of public works much wanted, before anything can be done towards properly "developing the resources of the island," as the phrase goes. Roads, above all, must be made; the southern island wants them nearly as much as the northern. It is rather hard, both on the poor immigrants them-selves and also on the older settlers, that Mr. Reader Wood should have been sent to England to get together a swarm of emigrants of the poorer class, and that on their arrival they should find the land on which they were to be settled was not even conquered. It was to have been conquered at a certain cost; leaving a large surplus out of the Three Million Loan for the purpose of employing the immigrants. All the money is spent; and, worse than all, the Home Government says it will disallow the Settlements Act unless its conditions are complied with. Meanwhile, the poor people who have been out suffer; and the colonists grumble, foreseeing a pretty heavy poor's-rate as the probable result of such experiments.

Those who live in the country know that there is scarcely a house in many districts which is not hopelessly "damp," in one room or another. The Scottish Farmer has an elaborate article on the means of preventing this too general evil. The only objection to its advice is that it could not in most neighbourhoods be carried out without a very heavy expense. A man who is building at Bath, or anywhere on the Great Oolite, must be singularly careful of other people's feelings, and singularly regardless of money, to make the building stone, which nature has provided cheaply and abundantly, a mere secondary matter, and to look on hollow bricks, or walls of concrete faced with brick, as the proper materials. Of course, if you want a perfectly dry house, it is no use setting up without protection the thinnest possible walls of a stone which sucks up moisture like a sponge. You ought to face the weather side of your house at any rate with brick, hollow or solid; or, if you prefer it, put in a brick lining, leaving a free space for the passage of air between the brick and the stone. Above all, you must cut off communication with the subsoil by putting in a course of slate or concrete, or, better, by placing along the ground-level several courses of Taylor's patent "ventilating bricks." Mr. Taylor is an enthusiast in brick-making. He has a plan for building cheap water-tight cottages, and so keeping down the "rheumatiz," which

has become an institution among our country folk. The body of the wall is of concrete; it is faced with prism-shaped bricks bevelled out like a Greek cornice, one of the narrowed sides being firmly bedded in the substance of the wall. This may do in many districts; but in stoneproducing countries men must use what lies at hand, and so there is nothing for it but to make a really good foundation, and lay a course of slate at the ground-level. Will cottage-builders in general be conscientious enough to do this? A fertile source of damp (easily guarded against by a little care) is the use of salt in mortar. In towns, when work has to be done "to time," bricklayers constantly put in salt to keep the mortar from freezing. Sea-sand, again, is largely used in making mortar; though all good architects take care to see that even inland sand is well washed to free it from any saline admixture. Unfortunately, though the law has done some-thing to check the disgracefully bad building of a few years ago, it is still far too much to hope that builders will care as much about guarding against damp as they do about securing large profits. Yet, as many people do build houses for themselves "regardless of expense," it is well to be reminded that damp is a fertile source of disease, not the less dangerous because it is unsuspected in its working, and not thoroughly understood in its effects. Many doctors go as far as to say that you had much better have your house in the midst of what are more forcibly than elegantly termed "stinks," than suffer from dampness in your living or sleeping-rooms.

THE Builder, which has always been an earnest and consistent advocate of sanitary measures, has some very good remarks about the directions at last issued by the Privy Council with regard to cleansing, ventilation, &c. They are pretty much the same as those issued in 1859; but what is wanted is not more knowledge, but more power. A whole group of acts 18 and 19 Vic., cap 116, under the title of "Nuisances Removal Acts," gives extensive powers to guardians of parishes and other bodies. There ought to be a good abstract of these made by a competent lawyer, and issued to every parish guardian, parish medical officer, and other person empowered by the acts. Section 13 of 23 Vic., cap 77, is more important still; it enables any inhabitant to redress the neglect of the parish officers, by getting an order from the justices for the removal of any nuisance. The justices can direct the premises to be entered, the nuisance to be removed, and costs to be charged on the offender. Where a nuisance cannot be removed, and better materials are not at hand, a layer of some inches thick of clean earth is very useful. It is recom-mended that in the large parishes of our great town disinfecting rooms, furnished with ovens, like those in use in some hospitals and workhouses, should be opened, where woollen bedding, &c., can be effectually fumigated and heated up to 250° at a small cost. Everybody ought to know that sulphurous acid, made by burning a little brimstone in a carefully-closed room, is the best disinfectant for walls, papers, &c. London is getting very frightened; but London, with 25 deaths per 1,000, is healthy compared to Leeds, with 36, and Liverpool (with its cellars), where the rate is actually 39 per 1,000.

BOTANISTS who value the Surrey heaths as being one of the best "grounds" in England for rare plants, had better make the most of their time. We are told that the value of peat as an article of fuel is being again discussed in scientific quarters. Some time ago, the majority of the engineers who examined the matter said that peat was all but worthless. The Building News thinks that this was because they only tried the dried peat, full of coarse fibre, instead of the condensed peat from which the roots have been taken away, and out of which all moisture has been squeezed. This can be sold at the price of coal at the pit's mouth (what pit's mouth we are not told, although of course the price in Staffordshire, for instance, differs from that at Newcastle). There are, it seems, 140,000 acres of peat near London, from five to fifteen feet deep, which will not long be left unworked, if (as The Building News asserts) the heating power of condensed peat is to that of coal as two to one. It has been tried in steam-engines of all kinds with a saving of fifty per cent.; while, as it contains no phosphorus, and next to no sulphur, it does not injure the ironwork with which it comes in contact. This absence of sulphur makes it invaluable when converted into charcoal for making steel. Further, it makes no smoke, leaves no cinders, and seems altogether a most satisfactory succedaneum. We fear the peat-growing plants of Surrey are doomed. The country close round London used to be

one of the wildest, south of the Trent at any rate. We can remember the cotton-grass abundant in a wet corner of Hampstead Heath; but Epping Forest enclosed, and the heaths pared for fuel, the plant and insect gatherers will have to go further, and probably

It was bitterly, but too truly, said, just before Catholic emancipation, that the average Englishman knew more about the Hottentots or New Zealanders than he did about the men of Galway, for instance. Things are changed for the better; but still there is woful ignorance among us, not only of the people, but of the country. Of the hundreds who have been at all the chief abbeys abroad, how many know even the whereabouts of Holy Cross or Jerpoint? A good many will be drawn over to visit the Dublin Exhibition; let us hope that most of them will see something of the country before they come back. Quite incidentally, in an article on roofs and spires, The Builder of last Saturday points out one spot which every educated traveller ought to make a point of going to-the Rock of Cashel. Two abbeys, a cathedral, and, above all, MacCormac's Chapel, of which our architectural contemporary enthusiastically says, "as an almost solitary instance of a mediæval stone roof of grand architectural character, it is well worth a trip to Ireland on purpose to examine it." Its probable date is the seventh century. As everybody knows, the groined roofs in our cathedrals are made of hollow slabs of cement. The ruin-hunter in Ireland has truly an embarras de richesses. Yet, ludicrously enough, The Union Gazetteer, pubblished by authority some sixty years ago, said, "the country is singularly destitute of monu-ments of antiquity;" and we have seen the absurd statement copied into at least half-a-

dozen popular manuals. THE natural order of things, as many of us understand them, is for the seller to stand, cap in hand, bowing obsequiously, the obedient, humble servant of the buyer. But this order is very often inverted. Instead of thanking you for your custom, the seller is beginning to think he does you a favour by allowing you to partake of his goods. Like Mons. Jourdain, qui se con-naissait bien en étoffes, he takes up a certain line for which he has an aptitude, and is kind enough to allow others the benefit of his sagacity—pour de l'argent. He takes care, however, to make them feel he is not in the least beholden to them, but that the obligation is, in fact, quite the other way. In towns, this evil generally cures itself. Competition brings humility; the nation boutiquière loses its morgue when the proportion of sellers to buyers is sufficiently increased. It is in outlying districts, where the rail is not, and where carriers come within half a mile or so once a-week at the most, that the seller rules supreme. You have no choice between him and starvation; and as for caring for your custom, he is sure to be within the influence of some town which will consume all his surplus produce at his own price. People used to go down into Devonshire to economize. It was popularly supposed that fowls could be had there for almost nothing, and that "scald cream" would be supplied twice a-day almost for the asking. Let no father of a large family who wants cheap change of air delude himself into the notion that this is the case now. Never was there a greater mistake. Scarcely in the most lonely Dartmoor or Exmoor villages will he find any perceptible diminution in prices. Ilfracombe makes one half of the county dear, and Torquay the other. It is a fact worth noting, that under the northern slope of Cawsand Beacon, with the mass of Dartmoor to cut you off from it, you still feel the influence of that wonderful Torquay. "Regraters" (as the Devon folk call them, not using the word in a bad sense, but in what Dr. Johnson gives as its original meaning) travel round the villages, and buy up fowls, and cream, and other delicacies. They waylay the farmers' wives on their road to the local markets—of which, by the way, they set the prices—and carry off the contents of all their baskets, to the despair of the neighbouring gentry. And so it comes to pass that, having made your way down into the wilds of middle Devon, with a swarm of "etiolated children" (as the French doctors call those who want sun and air), you begin to find that air and bad cider are pretty nearly all that you can reckon on; the sun being very chary about putting in an appearance on two successive days, and the farmers round thinking they are going a great deal out of their way to serve you if they let you have, at a price a little above that of the country-town from which you have come, and

with the trouble of fetching them into the bargain, just about half as much milk, and eggs, and "Devonshire cream" as you reckoned on getting. You are only a chance visitor; and the "regraters" are there all the year round. Dr. Edward Smith's report reminded us that the children of the labouring poor are, as a rule, brought up without knowing the taste of milk. Parsons, who, whether labourers or not, are mostly poor, are in some places as badly off as any one; they must either have a cow of their own, or keep their children on short commons.

"Heart's Content," the place to which such constant reference is made in Mr. Russell's account of the Atlantic Telegraph enterprise, is, according to the New York Times, a dirty little hamlet in Newfoundland, noted principally for its huge musquitoes, untrustworthy people, and

beautiful bay.

The members of the Archæological Institute held their meeting recently, in the county of Dorset, and in one of their excursions visited the little Norman chapel of St. Catherine, at Milton Abbey. The Rev. C. W. Bingham there related a legend, that on a certain day in the year the young women of Abbotsbury used to go up to St. Catherine's Chapel, where they made use of the following prayer: "A husband, St. Cathe-rine; a handsome one, St. Catherine; a rich one, St. Catherine; a nice one, St. Catherine; and soon, St. Catherine." Mr. Beresford Hope, who at these gatherings is always equal to any emergency, thereupon modestly proposed that all gentlemen and married ladies should retire from the church, so as to afford the young ladies present the opportunity of using so desirable a

CORRESPONDENCE.

THE EDUCATION OF TASTE. To the Editor of THE READER.

Sir,-Allow me to give you a short summary of a conversation in which I took part some days ago, on the subject of taste in England. This is rather a delicate question, it is true, but one of paramount importance to an industrial nation.

My interlocutor, who, like myself, was not an Englishman, seemed to me to have noticed in even a more lively manner, as a foreigner, the salient features of your usages; and, by his position, he was better enabled than most persons to speak with impartiality of these customs.

"They are on the right road," said he, "to become the greatest nation in the world; therefore it is not very astonishing that strangers should turn their attention towards this country, and follow its development with their best wishes. When a people is seen to possess alone for so long a time a free government, to cover the world and civilize it with its colonies, while others cover it only with victims and with halfformed projects, one cannot refuse to this people

a brilliant superiority.

"The wise explain it by saying eloquently that civilization, arising in India, goes onward in its course, and proceeds from East to West; philosophers say that the Catholic nations are in an evident state of decadence; politicians lay especial stress on the liberal form of the government. Whether it be this way or that, the superiority is incontestable, and everyone acknowledges it: but what is equally acknowledged-and here I arrive at my subject-is the supremacy of France in the matter of taste. This rather displeases me, for the latter nation is but little worthy of it at the present day, and I think that this supremacy is easily explained by considering the excellent opportunities of artistic education that the workmen of its great towns and cities pos-sess. The people of Paris, to mention no other city, are born and live amidst the most elegant creations of taste. The operative, in going to the workshop and returning home, passes and repasses incessantly the splendid shop-fronts and numerous bazaars-to speak only of thesewhere are perpetually displayed the thousands upon thousands of fancy articles and objects of good taste. They are really permanent exhibitions; the mind receives an incessant excitement, which I defy the most indolent intelligence to resist. The education of the Parisians, then, is formed agreeably and without their perceiving it.

"The little boys and girls act like children: they pass the evening lounging in front of the shops; and also take as much time as they can in returning from their daily avocations; they may be continually seen gathered in little groups before the beautiful display, laughing, discussing, criticizing, and choosing in play the richest articles, or those which please them most. They

complete this solid and intelligent education on Sunday in the museums of every description; in these are no longer found, in general, any but objects of art properly so called. The masses would not understand much about these, and would take but slight interest in them, if their eyes had not already received an introductory initiation by contact with perfectly well known industrial articles of utility and of common use, which also in one point of view could be classed in the category of pure art. The awakened intelligence is thus led, without knowing it, to compare these different forms of art, and to turn the comparison to useful account.

"A proof that good taste is highly developed by education is that in France even, in the smaller towns, bad taste rules supreme; as in every other other country, it struts about, and

dictates its own laws.

"For some years past England has entered upon an excellent path, with reference to the scientific and artistic development of the artworkman, by the creation of working men's clubs and colleges; and the results are already remarkable enough to extort cries of alarm from the French commissions. England has indeed formed an admirable permanent exhibition at Kensington; unfortunately Kensington is at a long distance from those districts where artizans reside, who, tired after their day's toil, derive no more profit from it than they derive from the other English museums, which are shut precisely on the only day when one might go and visit them!

"What should be done to remedy these evils, and to form in London an adequate number of schools of good taste? It would be to establish in working men's clubs, and especially working men's colleges, small museums, always open to young persons and the public; these would become so many branch establishments of Kensington, the central establishment, 'University of

Good Taste.'

"Each department of English industry should be invited to send thither a specimen of its most remarkable productions, with its name inscribed beneath; they would all ask for nothing better than this, and foreign manufacturers would hasten, through courtesy, to follow their example. [For my own individual part, I would send a collection of statuettes in porcelain, after Thorwaldsen, which I bought in Copenhagen.] These small partial museums would not take long to form, and I believe that the authorities would soon become much more embarrassed to find house-room for the various articles than the manufacturers would be to furnish new ones.

"International societies, even, might be established with this view, as—pardon me for the comparison — acclimatization societies were formed; and they would render in one year more real service than would be yielded in an entire century by the avalanches of writings published in England on art and taste."

Here the conversation ceased. You, Sir, are a better judge than I whether it is worth the honour of publication.

AN EXILED POLE.

PURE CELTS.

To the Editor of THE READER.

Sir, -The Times is always singularly unlucky in its Irish articles. When it really does try to be civil, it manages so awkwardly, that the intended compliments are worse than insults. Not long ago it urged us, in a spirited "leader, to go and visit our snug little "cattle farm" across the herring-brook-greater civility, less fraud, less to "shock the moral sense," could be found there than in countries pretending to a higher civilization. This was a wonderful concession ; but before this "leader" was half over its force was somewhat destroyed by the hint that by-and-bye, when there are more English there and fewer natives, Ireland will be a much more desirable place even than it now is. "The Irishman," indeed, "who has never touched other soil is quite as fine "a specimen of humanity as the Yorkshireman or East Anglian, yet the sooner he gets mixed with foreigners of all kinds the better. This is blowing hot and cold with a vengeance. Of course, the Irish papers are up in arms; even such sober prints as The Northern Whig and Dublin Evening Post talk of insolent patronage, and speak bitterly about the reckless way in which The Times is constantly marring the reputation of Ireland as a country, and of the Irish as a race. With this point I have nothing to do; whatever may be the faults of other races, self-satisfaction is undeniably that of the English; and impertinent as this condescending style of praise seems to the thin-skinned Hibernian, it is as much as any nation ever gets from

the thorough-going Englishman, and therefore is all we can expect from the thorough-going Eng-lishman's paper. No Englishman, unless he has lived in a University atmosphere, has the least conception of the Socratic εἰρώνεια—that selfdepreciation and glorifying of others which every Irishman habitually practises, to the great injury of his nation in this matter-of-fact world. The Times is quite right, Ireland gives herself a bad character, "does not do herself justice in the eyes of her critical sister," and the sooner Irishmen give up that quaint way they have of cloaking their pride under a mock humility, which other people are apt to take in earnest, the better. But the grand mistake of *The Times* lies in its historical "facts"—it is always weak in that direction. I do not meddle with its ethnological views; I will not question its assertion, that "the mixed race swallows up the less mixed all round;" but when it says that "Ireland is too Irish to make her way with the rest of us," and hopes for a grand influx of foreigners, I simply say, what every student of Irish history knows, that perhaps in no part of Europe has there been such a thorough mixture of races as in Ireland. There are as many different elements in the population of England, but they stand by themselves -pure Jutes in one part, unmitigated Saxon in another, Dane by himself elsewhere. In Ireland, owing to the wars and the clan system, a far more perfect fusion has taken place. Under a Macguire or a Norman Fitzgerald, might be found men of every "nationality:" English from the pale, drawn away by the love of a wild life; Welsh immigrants, Scots, Normans, and Scandinavians; but all taking their chieftain's name, and all sinking their differences as soon as they were bound to him. From the earliest, too, there have been Celts and Celts; no one out of Printing House Square ever thinks of a so-called Celtic nation as homogeneous. Tradition is seldom quite wrong in such matters; and tradition tells of three waves of population moving upon Ireland from the eastward, before the "Milesian" (as he is called) came in from the south-west. Of these the earliest are described in much the same terms which we should use in describing the Finns. Their successors are the large-limbed, grey-eyed Celts of the Romans, with their aurea cæsaries. Then comes the dark-haired race, probably akin to the Silurian, which, crossing with the elder breed, brought in that mixture of gray eyes and black hair so common in the south-east of Ireland. The "Milesians" came next—if they ever came at all- and then shiploads of Saxons here and there. After that the Danes, who held for centuries the chief seaports, Dublin being their great stronghold, the suburb of Osmanstown (town of Ostmen, Eastmen) preserving their name. They built Christ Church Cathedral, now in its ruinousness such a shameful contrast to St. Patrick's close by; the two are not a bowshot apart, but in these days each "nation" must have its own church. Irishized, however, they soon became. After Clontarf, their kings settled down into respectable chiefs, and the M'Auliffes (Olave's clan) got to be, like the Normans after them, Hibernis ipsis Hiberniores. After Clontarf, I say: why to most Englishmen Clontarf is a little less real than the war of the Seven against Thebes. It is a historic battle, nevertheless. A Shetland friend, quite lately, communicated to me portions of the Saga, which he had often heard when a boy, recording the defeat of the Norsemen by the Irish over-king. It caused a great migration and intermixing among the "Septs." Then, if any one name, for instance, coming up from the extreme south at Brian Borohme's summons (his harp is the one thing worth seeing in Dublin University Museum, and more authentic than Guy Fawkes's lantern at the Ashmolean) remained, intermarried with Danes, and soon appear in the Dublin city-roll. There is not a more mixed population in the world than these ill-favoured, weazened, smallfeatured Dublin folk; and the same holds more or less of all Ireland. You cannot lay your finger on a piece the size of Sussex and say (as you can of so many English counties) "There's only one breed here, at any rate." It is not at all my purpose to discuss the why of Ireland's backwardness in the world's race. When there were fewer foreigners she was the richest, as well as the most "advanced" nation of her day; there is more gold in the Dawson Street Museum than in all the other museums in Europe. But what I object to is, that her backwardness should be charged upon an imaginary homogeneousness of race, the remedy proposed being an unlimited influx of foreigners.—Apologizing for the length of this letter, I am, Sir, faithfully yours,

A SOMERSETSHIRE RECTOR.

SCIENCE.

THE ATLANTIC TELEGRAPH.

THE expedition which has just returned, after its attempt to lay the Atlantic Telegraph cable, marks an important era in Submarine Telegraphy. The results of this expedition demonstrate to the minds of all scientific and practical men whose attention has been turned to the subject, that with a ship qualified for the work, and with proper appliances for paying out and picking up the cable, success is almost certain.

The causes of the present failure are evident. The faults in the cable arose from carelessness in leaving the pieces of wire which had been cut off from the ends where splices had to be made, lying about amongst the coils. Every reasonable person must have anticipated that in a cable more than 2,000 miles in length some fault which could not have been foreseen might be developed; and therefore, whilst the negligence which allowed these pieces of iron to remain among the coils was very reprehensible, the blame of the failure rests much more strongly on the want of attention to the details of the picking-up apparatus, and the neglect to remove projections from the sides of the ship, such as the hawse-pipe, which frayed the cable.

It may not have been anticipated that the cable could be brought up from such depths as 2,000 fathoms; but Dr. Russell's very interesting diary shows that the machinery was barely sufficient for the recovery of the cable from 400 fathoms; it was known that in any case of picking-up, the cable would have to be transferred from the stern of the ship to the bow, and that the huge ship would have to be turned round. Hence it is remarkable that a careful survey of all removable projections which could interfere with the cable was not made before the ship sailed. A little more forethought as to details would have saved this costly lesson from experience.

experience.

This want of care is the more remarkable, seeing the great care taken by the Atlantic Telegraph Company and the Telegraph Construction and Maintenance Company in the design and manufacture of the cable, and in fitting up the ship and the paying-out apparameters.

ratus.

The Atlantic Telegraph Company obtained tenders, with samples of cable, from various parties, and appointed a committee, consisting of five gentlemen of high scientific reputation, who were unconnected with the Atlantic Company, to report which of the tenders submitted gave the greatest promise of success. The tender submitted by Messrs. Glass and Elliot (the firm since merged into the "Telegraph Construction and Maintenance Company") was recommended for acceptance, subject to certain modifications in the form of cable. The facility with which this cable has been paid out and recovered from the greatest depths, fully justifies the advice of the committee. The electrical properties of the cable were most carefully tested during manufac-The copper conducting wire was required to possess a specified conducting power. The gutta-percha with which the copper strands were covered was most carefully freed from extraneous substances, and its insulating power was at least five times as good as that used in the former Atlantic cable; and the entire insulating covering of the conductor exceeded by from four to six times the standard of resistance which had been specified. The core, consisting of the copper conductor and its insulating covering (viz., four coats of gutta-percha, alternated with layers of Chatterton's compound) was made in mile lengths, and the electrical tests were applied to it whilst in water, under a pressure of 600lbs. per square inch; the joints by which the separate lengths were united were also most carefully tested. Great precautions were taken in conveying the core from the manufactory in London to the works at Greenwich, where the outer covering was put on, and where the cable was completed in lengths which would admit of its being conveniently conveyed down the river to the

Great Eastern. From the time when the insulating covering was put on to the copper wire till the finished cable was coiled in the tanks filled with water, on board the Great Eastern, it was kept in water, except when the outer covering was being actually put on, and the resistance of the insulating material was measured daily. The tests were such as would show the slightest fault—i.e., such an injury to the outer covering as would lay bare the copper wire; but some additional test seems still to be wanting capable of giving notice of any injury to the outer coats of the gutta-percha, or of showing when the copper wire is eccentric to the core.

Every precaution which foresight could dictate was taken until the cable was placed on board the Great Eastern. The faults which appeared during the paying out arose from want of care after it was actually on board the ship. The explanation of this diminished care appears to be this—that whilst the cable was at the works the responsibility was individualized; on board the ship the responsibility became divided; moreover the preparations were latterly much hurried.

The experience derived from this expedition shows that the cable is sufficiently strong to be brought up from great depths, at all events immediately after it has been laid, and when the end is on board ship; and therefore that faults which are detected during the laying can be repaired. The great increase of tension on the grappling lines, when the cable had been raised 1,500 yards by the grapnels on the 11th of August, seems to point out that even if the grappling lines had been stronger, the attempt to raise the cable would have ended in breaking it before it reached the surface; and that, if it is to be raised from such depths it will be necessary to devise some means of gripping the cable and severing it, so as to raise the end only, instead of having to lift a long bight. The Great Eastern steam-ship has been shown by this voyage to possess capacity to carry cable and coals sufficient for long expeditions; steadiness in rough weather; and power to disregard contrary winds, all of which qualities are essential to successful submarine telegraphic operations on a large scale.

Present experience, therefore, fully justifies us in taking a sanguine view of the success of a future expedition. We are not equally confident of the wisdom of leaving the portion of the cable now submerged at the bottom of the Atlantic till next year, instead of attempting its recovery at once. No doubt it may, at any time, be possible to recover a large portion of it, perhaps the whole, by the tedious process of picking up from Ireland; but we have no experience of the rate at which the ooze of the Atlantic is This ooze consists of the remains of the animalculæ and fish which inhabit the 2,500 fathoms between the bottom and the surface, which are perpetually descending like rain; we do not know the consistency of the ooze, nor the depths to which the grapnels penetrate, nor can we feel certain that the outer covering of the cable may not suffer some decay. If the exigencies of the Great Eastern ship, and the probability of bad weather in the more advanced season, render it impossible to make an attempt this year to pick up the cable, the chances of connecting the portion of cable now laid, with a new piece will become somewhat uncertain, and the prudent course for the company to pursue will be, to start next year with such a lengh of cable on board as will enable them, in the event of failure to recover the end of the present cable, to proceed to America and lay a complete line between Heart's Content Bay and Valentia.

We trust that the Atlantic Telegraph Company will not be deterred by the present failure from making fresh efforts. They now almost hold the prize within their grasp. They have a form of cable which can be paid out and picked up with ease. They have at their disposal a ship admirably qualified for this work, and a most efficient staff of officers. They have a tolerable certainty that the bottom of the Atlantic contains no hid-

den pitfalls along the course they have selected for their cable. We cannot, therefore, but reiterate our earnest hopes that they will not delay to make a fresh and, we fully believe, a successful attempt to carry out their great enteprise of uniting the two countries.

LUMINOUS RADIATIONS.

A N important paper has recently been communicated to the French Academy of Sciences by M. Desains, containing the results of his researches on the emission of luminous rays at a red heat. The chief facts contained in this paper are as follows:—

The previous researches of M. de la Provostaye,

The previous researches of M. de la Provostaye, conjointly with the author, have shown that different bodies have at a red heat very different emissive powers as regards light. Thus, oxide of copper was found to have a radiating power about ten times that of gold, whilst platinum came between these two substances.

In the present investigation, the former researches have been extended, and the luminous radiation from a large number of bodies raised to a red heat has been determined. Black oxide of copper, oxide of cobalt, green oxide of chromium, brown oxide of manganese, and red oxide of iron, gave a sensibly equal luminous radiation. Under the same circumstances, a paste formed of sulphate of lead and a little borax, also very readily emitted luminous rays of rather less brilliancy than the preceding bodies, but more than platinum. Platinum, again, was found to be more brilliant than gold; whilst this last metal emitted more rays than a layer of oxide of zinc, made adherent by the aid of a little borax.

Representing by 100 the luminous radiation of oxide of iron, and of bodies which are near it, that of platinum was about 32, that of gold 10, whilst oxide of zinc did not exceed 5, even if it attained this figure. An experiment showed that by mixing together chalk, a little borax, and water, the emissive power of this mixture was nearly as feeble as that of oxide of zinc.

In his former researches, the author raised the substances experimented on to a red heat by means of an electric current. In the present experiments, without altogether abandoning this mode of heating, the author has generally preferred placing the oxides submitted to experiment upon tolerably thick plates of gold or platinum, which were heated by means of eolipyles.

A comparative experiment, showing the different emissive powers of bodies for light, was made by taking one of these plates, about twenty-five or thirty square centimetres in area, and dividing it into four parts by two diagonal lines crossing in the centre. One of the divisions was left in its metallic state, a second covered with oxide of zinc, a third with oxide of iron, and the fourth with oxide of copper. When the coatings were dry, the plate was taken into a dark chamber, and heated on its under surface by a spirit lamp. 'As soon as the temperature reached redness, the effects which have been mentioned were seen: the four bodies being of different lamp.

When photometric observations were made, great care was taken to prevent the rays emitted by the substances investigated being mixed with those emitted by the source of heat. To prevent this, the trial plate was fixed at the end of a porcelain tube, the inside of which was blackened, or covered with oxide of iron. The external surface of the plate was then heated by a flame, and the determination of the emissive power made by placing a photometer near the open end of the

M. Desains mentions his surprise at the extremely small emissive power of oxide of zinc. His experiments with regard to it have been considerably varied, but have always led to the same result. The following experiment is given as a proof that the low radiating power of this oxide is not, from its feeble conductivity, caused by its external surface having a lower temperature than that of the other coatings on the same plate. A plate of platina was taken, and completely covered with oxide of zinc; upon half the plate thus whitened a layer of oxide of iron was applied above the layer of oxide of zinc—then the whole was heated, and, as before, the oxide of iron was found to be twenty times more luminous than the zinc.

Oxide of zinc, it is said, is one of those bodies which, at 100° C., have the same emissive power for heat as oxide of iron or lampblack; on comparing, however, its calorific radiation at a red heat with that of oxide of iron, it was found to be about 0.6 of the latter. Upon this M. Desains remarks, that it is evident at redness the ratio of

the radiating powers of these two bodies is far greater for heat than for light. But this difference, he says, is only natural, since in the sum total of rays which at a red heat are emitted by each substance to a thermoscope a large proportion of obscure rays exist, and these have no influence on the results of photometric measures. The thermoscopic measure is applied to the total emission; the photometric measure is applied to a particular class of rays only; it passes over those in which the length of the wave is above a certain limit.

M. Desains states that the foregoing experiments only refer to the effect of luminous radiation, properly so called; but the appearances change, and the relative brightness of incandescent bodies is much modified, when the rays emitted are united with those reflected or diffused, as occurs when the surfaces for experiment are placed in the midst of an incandescent space. These changes were illustrated in the following manner:—

A porcelain tube was taken, of about 0.06 metres in diameter; one of its ends was cut diagonally, and after having closed this end by a plate of platinum half of which was covered with oxide of iron, it was introduced into a furnace. The other end of the tube was open, and projected from the furnace. When heated the metal plate reddened first, the oxide appearing much more brilliant than the platinum; but when the sides of the tube became incandescent, the difference between the metal and the oxide diminished and almost disappeared. The platinum was now made to appear more brilliant than the oxide, by altering the position of the fire in such a manner, as to make the metallic plate considerably less hot than that side of the tube the light from which reached the eye by reflection from the metal.

These changes were explained, by observing the experiment through a polariscope; it was then seen that when the metal plate alone was incandescent, the light which came from the platinum to the eye was polarized in a plane perpendicular to that which passed through the axis of the tube and the perpendicular to the plate. In the second stage of the experiment, when the oxide of iron and the metal presented the same brilliancy, the signs of polarization disappeared. Finally, when the platinum appeared more brilliant than the oxide, the rays which came from the metal to the eye were polarized in the plane passing through the axis and the perpendicular to the plate; thus showing it was the reflected rays which predominated in the light coming from the platinum.

THE ARCHÆOLOGICAL ASSOCIA-

THE Institute has just concluded its meeting in Dorsetshire, and the Association has this week been holding its twenty-second congress in Durham. Students and visitors are gainers by such an arrangement. Instead of the chalk-hills with their breezy downs, they now see a land of smoke and fire. The pauperism of Wessex is exchanged for the wealth and industry of the land of the Brigantes. The busy shipyards of Sunderland and Hartlepool are substituted for the silent harbours of Poole and Lyme. But archæologists may still find some links between the two districts. Here Flambard found an opportunity for carrying out on the Wear the ideas which first floated before him by the banks of the Avon, and still the cathedral of Durham and the priory church of Twineham show the power of the energetic but unscrupulous minister of William the Red.

To all visitors from the south, at least, the city of Durham suffers in one point from contrast with York. We come to its cathedral full of recollections of that minster to which Archbishop Melton gave his wealth, and the Percies the stone and timber, dazzled with the splendour of the west front, touched with the beauty of the south transept, and haunted by the gracefulness of the window of the Five Sisters. With all its stateliness and massiveness. the Norman arch does not affect the mind, does not raise it from the earth, like the upwardpointing lines which find so high an expression at York. The feeling which they inspire may be a weakness, but it is a weakness which will probably be felt as long as human nature lasts, the sigh for something more than the present, the unutterable longing which can never be satisfied and which in all ages has formed the

mark and the creed of the mystic.

But if in this respect Durham yields to York, she can boast a far finer situation for her minster—can boast, too, far finer scenery of hills and river. Nothing can well surpass the

view from Framwellgate Bridge—the long reach of the Wear, the steep east bank fortified with the castle walls, and further on crowned with the west towers of the cathedral, both banks now hung and fringed to the water-side by thick woods, the whole scene ended at last by the arches of the Prebends' Bridge.

But last Monday nothing of all this was visible. A combined mist of rain and smoke hung over the river obscuring everything

hung over the river, obscuring everything.

One of the most remarkable features of the day's proceedings was Lord Houghton's speech on introducing the Duke of Cleveland as the new President. As usual, Lord Houghton was both thoughtful and graceful. The great point, however, of his speech was, that just as Mr. Gladstone had lately said that it was his object to reconcile Oxford with Lancashire, so was it the province and the duty of the archæologist to reconcile the past with the present—that archæology was simply a mere waste of time if it consisted only in a Dryasdust worship of stocks and stones, instead of enabling us to understand our forefathers, and to guide and enlighten our own actions. The Duke of Cleveland, too, in his inaugural address, seized upon this point, and showed how fully he understood St. Bernard's maxim, "aspice, respice, prospice." He pointed to Mr. Froude's writings as an instance where archæological study had been of service to history. Now, however, false as many think Mr. Froude's view of Henry VIII., yet this much is undeniable, that he has breathed life into his historical characters, and made a State paper as interesting as a novel.

After the speeches were finished, the castle was inspected under the guidance of the Rev. J. J. Ornsby. Its history is instructive. Here first stood a palace of the early Saxon bishops of Durham. But upon its being burnt, William of Normandy, whose keen eye saw the strength and advantages of the place, built on its site a castle. This, too, has nearly all disappeared. And the building, now composed of every style of architecture, is used for the University.

Among the objects visited were the great dining-hall, which had been shortened by Bishop Fox, who probably thought quite space enough was taken up for eating and drinking; the common-room, where the famous Bishop Butler had put in some windows in the present style of churchwardens' Gothic. But most interesting of all was to see the old Norman work continually cropping out in the fine doorway in the long gallery, and the under-ground chapel,

Nocte pluit tota redeunt spectacula mane, might have been the motto for the archæologists on Tuesday. A drive through a small portion of the Black Country, where the pit-engines are standing amidst hills of refuse and slag, and the waste water for the boilers makes miniature geysers, where the trunks of the trees are blackened with smoke, and the wheat itself blighted with an artificial smut, brought the archæologists to Lumley Castle. It is the seat of the Lumley family, now represented by the Earl of Scar-borough, who derive their descent from Lyulph. Of one of them a story is told, that when relating the antiquity of his family to James I., the King replied "O mun, gang nae further, let me digest the knowledge, for I didna ken that Adam's name was Lumley." The castle has been much modernized, but on the east side, overlooking the Wear, which would almost serve as moat, still stands the fine old gateway of the date of Richard II. In the hall is hung a collection of family portraits. Mr. Planchè, however, should not stemmata quid faciunt, but quid faciunt stemmata, how genealogical trees are manufactured. The value of the pictures, as originals, speedily vanished before his criticism. Their real worth, he observed, consists in forming a valuable source of information for the costumes of the period. A pleasant walk through the park brought the visitors to the ferry on the Wear. Then, following the footpath which skirts the south side of the Roman camp, which gives its name to the village, they reached the church of Chester-le-Street, once the seat of a bishopric. In it is the famous Scarborough aisle, where lie the effigies of fourteen of the Lumleys. But their value, too, as originals, are also destroyed by Mr. Planche's criticism, and, as Carlyle would say, there was one more lie less in the world. The church, on whose history the Rev. H. Blane read a paper, and which has lately been restored, is not without much interest. In the choir and south wall of the chancel are some sedilia and a piscina, whilst on the north-east side of the nave there have been two aisles; and, as Mr. Roberts pointed out, the double pillars in the nave showed how far the choir had formerly reached. Lanchester, with its famous Roman camp, some

eight or ten miles off to the westward, was the point next made. The camp stands on a high hill overlooking the village, forming the key to the whole district. It spreads over an area of something like seven acres. The walls, though they have been used for centuries as a quarry, still testify to its enormous strength. Surtees supposes, from the ashes and vitrified flooring, that it was destroyed by fire. Dr. Bruce, in an interesting paper, which thoroughly exhausted the subject, entered into various details of its history.

The village church was next visited, and as the Romans, on the top of the hill, have left traces of their power and might, so, too, the Normans have left theirs in the valley. Perhaps, as Dr. Bruce suggested, the stones of the camp had been used to build the church. Whether this be so or not, the rich Norman chancel arch still remains, and testifies to the former beauty of the building. Other points of interest were found in the carved imagery over the door of the sacristy, the corbel heads, and the oak stalls in the chancel, and the Norman arch, now forming a canopy over Dean Anstell's tomb in the south aisle of the nave.

THE POSSIBILITY OF REANIMATING THE DEAD.

DR. BENJAMIN WARD RICHARDSON has recently devoted his attention to an inquiry as to the possibility of restoring the life of warm-blooded animals in cases where the respiration, the circulation, and the ordinary manifestation of organic motion are exhausted, or have ceased; and in June last he presented a very able memoir on the subject to the Royal Society. The memoir is, Dr. Richardson states, merely preliminary; it does not profess to do more than to open the way to new work, and to show the reasons why the restoration of action, in cases where life is suspended, is at present so doubtful and difficult. The author has not confined himself to the mere question of treatment as applied when there are still faint indications of spontaneous animal action, or when such action has ceased only for the moment. Many of his experiments have reference, incidentally, to treatment under the circumstances named; but he has had actually in view a much wider research. His endeavour has been to afford an answer to the question why an animal body that has undergone no structural injury (that is to say, no destruction of organ or tissue), but has ceased to exhibit those actions which indicate what is commonly called life, may not be restored to life at a period previous to the coagulation of the blood in its vessels, if not previously to the period when the new chemical changes developed under the form of putrefaction are established? The memoir is divided into two parts: one of these parts containing the details of experiments, will be preserved for reference in the Archives of the Royal Society; the other part consisting of an analysis of the experimental evidence, with the conclusions to which the author has been led by the evidence, we present to our readers at full length :-

"In the experimental inquiry all the animals operated upon had been subjected to such means for suspending their animation as produced the least possible amount of change in the structure of organs. The animals were all healthy while living. To suspend the spontaneous action which they presented, and which marked their life, chloroform was employed in the large majority of cases; but in some instances carbonic acid was used, and in others the process of drowning.

The readiness with which chloroform can be employed, and the painlessness to the subject which is implied in its use, recommended this agent specially at first. As the inquiry has proceeded I have seen no reason, so far, to introduce any modification, inasmuch as the continuance of experiment and repeated observation have simply tended to indicate that the process called "death" is unity; and that if animal action, brought to a stand by chloroform, could be reproduced by any process, the same restorative process would be applicable after every other kind of suspension that was unattended by mechanical injury of structure.

Throughout the inquiry I have kept steadily in view a process for restoring the development of force which is constantly and successfully being performed. A simple process enough! I mean the re-lighting of a taper. I see in the taper as it is burning the analogue of living action. The combustible substance having the force stored up in it circulating through the wick as through so many vessels, becoming distributed in the

presence of incandescent heat so as to combine with oxygen; then itself liberating force, burning, and in the process showing spontaneous section, the applicant form of living action.

action, the analogue form of living action.

From this analogy I gather, further, that if I could set the blood burning as it burns in life, after its natural combustion has been suspended, I should re-light the animal lamp, and that the re-development of force in the case of animal motion, which is life, would be re-established.

But how in the case of the animal body is the light to be applied? That is the difficulty.

Suppose that the taper or the fire were known only to us from their spontaneous manifestations, would the task to restore their burning if that had gone out be less difficult? What philosophical process should we adopt? We should first most naturally take fire from fire when that were possible. But how, when that were not possible, should we proceed to obtain the spark for kindling that which we might well know would burn spontaneously after kindling, the proper conditions being supplied! In such case we should most naturally look for the process by which fire is spontaneously exhibited, and we should discover it in the friction of one body with another; in the friction of stone, for example, with iron. Straightway we should imitate this and produce fire, and know how to renew and perpetuate it.

Again, in our observation of burning bodies we should see often that a point of flame well-nigh extinguished would re-kindle under a little additional friction of air, or an additional communication of matter that would burn, and we should acquire an art of sustaining fire by these

Lastly, as we went on observing we should discover that the force elicited in the combustion could be so applied as to set in motion almost endless mechanism; and we should learn, as we have learned, that however complicate the mechanism, however numerous its parts, it takes all its motion from the fire.

The physiologist who would distinguish himself by learning the art of resuscitation must, I have thought, place himself precisely in the same condition as the primitive man, who, in the matter of ordinary combustion, would pass to the civilized man, through the phases I have described; and it seems to me that, so far as we have progressed, we have become acquainted with three natural steps in the inquiry at least. We have discovered that when the animal fire is declining from want of air, it may be fanned into existence again by gentle friction of air. We have learned by an experiment, first thoroughly demonstrated before the Royal Society in the early days of its remarkable history, that when the animal fire is waning, owing to deficiency of fuel, that is to say, of blood, it may be revivified by the direct introduction of new blood. Lastly, we have learned that the natural or spontaneous combustion of new blood is due to the affinity of the oxygen of the air for combustible substance in the blood, when such substance is presented to the air over a sufficient extent of surface.

These observations may be received as demonstrable truths; and to them may be added an inference which amounts nearly to a demonstration, though all its elements have not yet been estimated—that the motion of the animal (the action of its mechanical parts) is produced by the force evolved in the process of com-

The experiments submitted in this paper have reference to the best means to be adopted for fanning into active life the animal fire that is expiring but is not suspended. But they extend also to the deeper questions, whether animal combustion cannot be re-established when it appears to have been extinguished? and whether so-called vital acts would not be spontaneously manifested upon such re-establishment of animal combustion?

In the part of this paper which contains the details of experimental research, the experiments are classified in three series.

The first series of experiments has reference to attempts made to produce combustion of blood in the lungs by the introduction of air—Artificial Respiration.

The second series embraces experiments in which attempts were made to induce circulation of the blood by physical operations—Artificial Circulation.

The third series supplies the records of experiments in which the effects of an increased temperature upon the body were observed.

FIRST SERIES OF EXPERIMENTS.—Artificial

Respiration.

The first series of experiments, those in

which artificial respiration was employed, exhibits, I believe faithfully, the precise value of artificial respiration. In the preliminary inquiries, the animals, having ceased to breathe, were immediately subjected to artificial inflation by means of double-acting bellows. The result in every case was, that whenever the action of the heart had come to rest, the temperature of the air employed being at various degrees, from 40° to even 120° Fahr., no reaction followed the inflation.

In opening the bodies of animals thus treated the lungs were invariably found empty of blood, and in a large number of cases emphysematous, while the right side of the heart was filled with fluid blood.

In one striking experiment, where respiration had entirely ceased and no action of the heart could be detected from pulsation, a recovery took place in a dog. Narcotism was again carried on to the same extremity, with recovery on inflation; and this was repeated once more with the same result. But in this experiment, although, to appearance, animal action was entirely suspended, a minute examination of the heart, through an opening in the skin sufficiently large to allow the mouth of the stethoscope to rest on the ribs, but not to injure either them or the intercostal muscles, proved that there was still sufficient action of the heart to produce a faint first or systolic sound.

These experiments by inflation were modified. So soon as the animal ceased to exhibit evidence of life the artificial respiration was set up, the chest-wall was removed, and the effects of the artificial respiration on the heart were observed. In every case where the operation was performed within five minutes, the heart was discovered pulsating. The action was uniformly best marked in the right auricle, next in the right ventricle, next in the left auricle, and next in the left ventricle. Contraction remained longest also in the same order. But it was observed uniformly that the contraction of the right ventricle never sufficed to fill the pulmonary artery with blood so as to re-establish the pulmonic circuit.

In one case the animal was suspended with the head downwards while the right ventricle was contracting vigorously. In this case blood passed into the pulmonary artery, and faintly coloured the surface of the lung, which was previously pale; but the pulmonic circuit was not re-established, and after death the capillaries were found to be obstructed mechanically from coalescence of the blood corpuscles.

These experiments with the chest laid open were varied by the employment of air at different temperatures. The evidence was clear that when the contractions of the heart were failing, an increase in the temperature of the air to 140° Fahr. caused a more vigorous action, which often lasted from five to ten

To determine whether the act of insufflation of air at a mean temperature of 60° was sufficient of itself to set up contraction of the heart, two animals were destroyed with chloroform and allowed to rest fifteen minutes. Then, in one animal, artificial respiration with air at 60° was employed for five minutes, and the hearts of both animals were immediately exposed to view. There was no action in either case at first; but, after exposure to the air for a few minutes, the right auricle in both hearts commenced to contract, and the ventricles followed. But the action was in no way more determinate in the animal that was receiving air by inflation than in the other animal. I notice this point particularly, because some experimentalists, who have made but one or two observations, on seeing the heart pulsate during artificial respiration, have conceived that the phenomenon was due solely to the inflation. I believe it myself to be due to the action of the external air, which at a moderate temperature gives up a little oxygen to the blood in the walls of the heart, by which some heat is evolved, and therewith motion is exhibited. My reasons for this view rest on the facts that a current of air at 35° Fahr., brought to bear on the heart, at once stops the action, while another current above 60° restores it, and that a little vapour of chloroform or of ammonia blown upon the heart-both of which agents stop oxidation — immediately arrests the action, which returns, at a sufficient temperature, when these agents are lost by diffusion. I believe also that the right auricle is last to die, because its thin walls allow the passage of oxygen to venous blood on their interior, since on washing out the auricle thoroughly with water, or on

applying to it a substance which prevents oxidation, the auricular motion at once declines.

These remarks on the effect of artificial respiration in relation to the motion of the heart do not apply with the same force when the air employed for inflation is heated to 120° Fahr.; then even fifteen minutes after death, if the inflation be sustained, the heart is found contracting as the chest is laid open, the action really being sustained by the diffusion of heat from the lungs to the heart; but the action excited is insufficient to produce a pulmonic current.

The experiments were further modified by using for insufflation other gases in place of common air. Oxygen was thus used, oxyhydrogen, ozone, and air containing 0.20 per cent. of chlorine. With two exceptions, the same observations are applicable to these experiments as were made in reference to those with common air. As a rule, the gases possessed no action on the heart to restore the pulmonic current when the natural action had been arrested. The exceptions were, that when the action of the heart was still feebly proceeding, respiration not being suspended, the air containing chlorine or ozone produced a quicker restoration, the ozone being much the less objectionable in regard to its after-effects.

The experiments on artificial respiration were finally modified by using the electro-galvanic current to excite the muscles of respiration so soon as natural respiration and circulation had ceased. By inserting a fine needle, insulated except at the point, into the larynx of an animal, and the other needle into the diaphragm, and by regulating the shock by means of a metronome, so that a given number of shocks representing the respirations of the animal are administered, the most perfect appearance of natural respiration may be sustained for so long, in some cases, as seven minutes; and the phenomena are often remarkable, and, to the inexperienced, deceptive. Thus, owing to the action on the vocal apparatus, a rabbit will scream as loudly as in life; and, lying breathing and screaming, might well be considered to be alive. But all the while the heart is at rest, if it have once rested, and, on opening the chest, the lungs are found bloodless. Reviewing the whole series of experiments, I

Reviewing the whole series of experiments, I am led to the conclusion, and I think it admits of direct demonstration, that artificial respiration, in whatever way performed, is quite useless from the moment when the right side of the heart fails in propelling a current of blood over the pulmonic circuit, and when the auriculoventricular valve loses its tension on contraction of the ventricle. At this point the blood-column is broken; the resistance to the passage of blood is of itself almost overwhelming, while the muscular action is decreasing in power in proportion as the difficulty of propulsion is increasing.

Another obstacle is in the blood itself. It consists in the rapid coalescence of the bloodcorpuscles as the motion of the blood ceases. This is so determinate, that within three minutes after its complete cessation, the blood, though still fluid, often fails to be carried, even by a moderately strong stroke, over the lungs. In one experiment the chest of a strong dog was laid open while the animal was under chloroform, and artificial respiration was sustained. Both sides of the heart were acting vigorously, and there was a good arterial current. In the midst of this action, which could easily have been sustained for an hour, the pulmonary artery was suppressed for the space of two minutes and fifty seconds. Then it was liberated, and the ventricle, which was still beating vigorously and gave out a valvular sound, carried the pent-up column into the pulmonary vessel; but there was no circuit. The lung was somewhat congested, and the capillaries were blocked up so as to resist an impulse which, increased by galvanism, was more active for some minutes after the liberation of the artery than it had been previously.

The last obstruction is the coagulation of the blood; but as this does not, as a general rule, occur (in cases where the blood vessels are not opened) within twenty minutes, and often not within an hour, it may be considered a secondary difficulty, though naturally fatal to success, according to our present knowledge, when it has taken place.

Regarding the modes of applying artificial respiration, and the time, the facts are briefly as follows:—

1. It is unnecessary and even injurious to employ it so long as there is any attempt at natural

respiration.

2. Before employing it, the patient should be placed with the head slightly lowered, a position which will largely assist the right ventricle in

any feeble effort it may be making to propel a current of blood into the pulmonic circuit.

3. It is of the greatest importance that the air conveyed into the lungs should be at a temperature above 60°; air below that temperature should never be used.

4. All violent attempts to introduce large quantities of air are injurious; for whenever the pressure of the blood from the right side of the heart is reduced, the danger of rupturing the air-vesicles by pressure of air is increased. In a word, the practitioner should remember that he is doing the same act, virtually, in artificial respiration, as he is when attempting to relight an expiring taper. Any violence will only disarrange the mechanism, and turn the last chance of success into certain failure.

5. So long as care be taken to sustain a gentle action of respiration, it signifies little, in my opinion, what means be employed. I have found a double-acting bellows, described in the experimental part of this paper, answer every purpose fairly. If any philosophical-instrument maker could invent a good and portable electro-magnetic machine with my metronome principle applied to it, so that from fifteen to twenty shocks per minute could be passed from the larynx to the diaphragm directly, the most perfect attainable artificial respiration would be secured so long as any muscular irritability remained; and I should suggest the value of such an instrument in cases where it could be brought into operation immediately after natural respiration has ceased. In combination with air heated from 120° to 140° for inhalation, every possible advantage that could accrue from artificial respiration, or rather from respiration artificially excited, would be secured, the persistence of muscular irritability being at the same time a sure index that the effort should not cease.

[We postpone till next week the conclusion of this memoir, containing the second series of experiments, in which various attempts were made to restore the circulation.]

PETROLEUM STEAM BOILER.

FOR some few weeks experiments have been going on at Woolwich for making use of Petroleum as steam fuel. Although this singular oil has hitherto evaded all attempts to be used for such purpose, the boiler at Woolwich can for any length of time be kept in action, reducing water to vapour at the rate of 12½ lbs. to 1 lb. of Petroleum, and yet it is evident that the full maximum of combustion and evaporation has not been attained; this may arise from so many precautions having been taken in designing the boiler. Directions have therefore been given by the Admiralty to alter it, so as to assimilate it more to the simple form of the marine boiler. As no account has yet been given of it, the

following description may be acceptable:—
It is a tubular boiler, containing 47 cwt. of water, covering the tubes about 3 inches. The firegrate surface is very small, containing only a superficial content of 4½ feet, and it is open to the atmosphere front and back. The grate consists of four bars, each in a separate firebox; there is a combustion chamber at the end, and a contrivance for burning the smoke.

On Saturday week the Lords of the Admiralty, in their official visit to the Dockyard, inspected the boiler, then in full action, and the inventor explained the process. It was necessary that the supply tank Petroleum should be above the level of the grate, for the oil to run in by its natural gravity. The tank, if it contains American Petroleum, should be away from the boiler; if it contains the heavy Petroleum, English coal oil, Barbadoes tar, or the Indian Rangoon, should be annexed to, or form part of it. Each bar of the grate is formed of porous material, tightly fitted with an iron trough; the oil is run into the latter, toward the oil which burns at the surface. Each bar has a separate pipe and fittings, and the oil can be burnt at any rate of speed, according to the quality and thickness of the porous material, and the pressure on the oil.

There is no ash, and not the slightest danger in attending the furnace. The oil is completely under command; the flame in each fire-box is that of a lamp; and the engineer attending is not inconvenienced by heat in front of the furnace. The extreme heat is in the combustion-chamber at the back, where the flames from all the boxes enter. These boxes are very small, and to a large boiler can be arranged in rows or stories one above another. This admits a larger grate surface than can be obtained in a coal boiler. The oil is

slow in burning, and when drawn out of the trough only shows a temperature of 108° F.

Mr. Richard, the inventor, remarked that he had only beaten the Woolwich experimental coal boiler by rather more than 50 per cent. in evaporating water; but he expected, on a few improvements being made to the boiler, to do more.

For naval warfare its advantages can be hardly foreseen. A stronger fuel would enable a steamship to take longer voyages without calling at coaling stations, or keep in blockade position for a longer period, and show no smoke. The flames shut off like gas, and may be kept up to a point sufficient to keep up steam. No stokers or coal passers, or only ten where now one hundred are employed.

For the mercantile marine, additional space for freight is obtained. Petroleum cannot be wasted as coal, can be stowed in places where at present nothing else is stowed, either in cells formed within the outer and inner skins of the bottom of iron ships, or in a second skin within.

The oil is to be found in every part of the globe; it is practically inexhaustible. It is to be expected, if such an important use is found for the oil—fuel for the steam-engine—means will soon be found by which the cost to the consumer will be greatly reduced, so as to facilitate its adoption for the purposes for which it appears so applicable.

In the ordinary course of things, this must come about.

SCIENTIFIC NOTES.

PROFESSOR HUXLEY has been elected Corresponding Member of the Berlin Royal Academy of Sciences

There is now in course of publication by "The Essex Institute" in America, a Naturalist's Directory, of which we have received the first part, extending over North America and the West Indies. It will be continued quarterly, and will contain the addresses of all the Naturalists in the world, so far as they can be ascertained, arranged under special departments according to the different countries where they reside. An alphabetical index will also give the address and class of study of each person whose name appears in the Directory. The editor requests that when any change of address takes place, notice of the same may be sent to him.

A CERTAIN aerial machine, said to be under such perfect control that it may be made to move against the wind, or to descend without opening the valve, has been creating some stir on the Continent. The foreign papers have hailed it as the solution of the old problem of making a balloon that will steer. The Espérance, for such is its name, is now in this country, and has been exhibited several times at Cremorne Gardens by the inventor, M. Delamarne. Its success seems to have been very indifferent, and for the present a steering balloon must remain amongst what Bacon calls the things "yet held impossible or not invented." The Espérance might perhaps take its place as one of the contrivances "extant which cometh the nearest in degree to that impossibility;" but more than this we do not think it is entitled to.

We understand that the Emperor of Mexico has ordered the adoption of the decimal system of coinage, weights, and measures in that country. How much longer are English chemists, and our other men of science, to be plagued by having to use one measure in the laboratory, and another in their homes?

ENGELBACH, in the current number of the Annalen der Chemie, states that he has detected rubidium and lithium in the basaltic rocks from the neighbourhood of Giessen. His analyses further show the presence of '026 per cent. of oxide of chromium and '012 per cent. of vanadic acid. With reference to vanadium, he states that this is the first instance of its occurrence in primitive rocks.

An interesting archeological discovery has just been made in the island of Elba, the particulars of which have been communicated by M. Simonin to the Paris Academy of Sciences. A number of bronze and stone implements have been found, nine-tenths of the latter being made of a flint entirely unknown in Elba, and which must have been brought from Naples, if not further. The principal articles found, beginning with the most perfect, are arrow-heads of a long triangular shape, recalling those which have already been found in Greece and Italy; knives, similar to those found by MM. Lartet and Christy, in the caves of Aurignac, &c.; scrapers, also similar to those found by MM. Lartet and

Christy and resembling those now used by the Esquimaux; adzes, of the same shape as those found by M. Boucher de Perthes, but smaller; nuclei, reminding one of the pains de beurre of Pressigny, and also other objects of indeterminate form. The discovery of remnants of the Bronze Age in this island explains a passage of Aristotle hitherto obscure, in which he remarks that in Elba bronze was worked before iron.

EXPERIMENTS have recently been made in France, by two independent investigators, on the cause of crystallization of supersaturated saline solutions. The results arrived at show that the crystallization only takes place through the presence of a particle of the salt itself. These particles are derived from the atmosphere, in which minute quantities of alum, sulphate of soda, &c., were found to be always present, and are depo-sited in the saturated solution when it is exposed to the air. M. Gernez, the author of one of the papers, has even extracted from the air enough sulphate of soda to render the crystals easily seen through the microscope. Having, however, made his experiments with glass vessels, which were open to an objection, he has now repeated them with vessels of platinum. The experiment was made in the following way: Some pure water was twice distilled in a platinum apparatus; several cubic metres of air, taken far from dwellings, were then slowly drawn through this water by means of an aspirator. After the air had passed through, a few drops of the water were evaporated on a glass plate, which was then microscopically examined. Crystals were seen, some of which were recognized as sulphate of soda, besides others whose nature could not be accurately determined.

WE recently noticed M. Edward Robin's paper read before the Academy of Sciences, on the possibility of diminishing the activity of respiration without diminishing the quantity of air entering the circulation. This, we read in the *Medical Times*, he professes to accomplish by the administration of large quantities of coffee, or anti-putrid substances (as tar-water or even "arsenical alimentation," &c.), which by their combinations with proteic mat-ters give rise to compounds which are not destructible by oxygen. In this way the rapidity of consumption is diminished without injury to the animal eco-nomy, and the matters in circulation resisting for a long period the action of oxygen, diminish the necessity of reparation. They produce a condition similar to that in which are the inhabitants of warm countries, who are so remarkable for the little aliment they require, and the abstinence they can endure; or the still more remarkable conditions in these respects of animals of variable temperature. This method the author considers is capable of the following applications: 1. As a means of diminishing the urgency of respiration so as to render anæsthesia less dangerous. 2. The production of artificial hybernation in mammalia. 3. The induction of fattening without the supply of fat or its materials. 4. The adjustment of alimenation in hot countries, so as to avoid the effects due to difficulty of respiration in the ascent of mountains, descent of mines, &c. 5. The diminution of the inconveniences of insufficient nutriment.
6. The diminution of the danger of surgical

MR. BAILDON has recently patented an ink or writing fluid for preventing fraudulent altera-tions in written documents, to be used in combination with a peculiarly-prepared paper, the colour in which is discharged, and the texture changed, by the action of the ink. The writing fluid is composed of dilute sulphuric acid, coloured with indigo, and the paper is ordinary writing paper tinted with ultramarine or any other suitable colour which is capable of being discharged by the acid. By this means the texture of the paper in the parts affected by the acid will be so changed and weakened as to prevent the possibility of alteration or erasure, and the ink or writing fluid, by penetrating through the paper, will be seen on both its sides. We learn from the French journals that a vegetable ink has been discovered by M. Plessis, which is not only unalterable in colour, but also in

SCIENTIFIC CORRESPONDENCE.

THE SOLAR SURFACE.

Rome, August 11.

In the last number of The Reader I have seen a letter from the Astronomer Royal, in which is said that I am mistaken in the interpretation of the willow-leaves, and "that the

divisions of the penumbra which I have represented are the thatch straws, which have long been seen." (READER, No. 136, p. 155, 1st col.)

been seen." (READER, No. 136, p. 155, 1st col.)
As in this matter a great deal of controversy
might arise from want of clear definition, I shall
first state what I have seen, and what I call
willow-leaves, leaving to those who have seen
them to judge whether they are such or not.

In very fine days and good conditions of air, especially in the first minutes of the observations, I see very often the entire disc of the sun, composed of small oblong bodies, projected on a darker stratum, which gives a reticulated appearance to all the field of view; the interstices between these white bodies occasionally are very dark and black. The best appearance to which I could compare the field of view of the telescope is to a field in the microscope when a drop of milk is observed with a moderate power, and the milk has a certain thickness; the only difference being, that in the milk the white bodies are round, while in the sun they are oblong.

Yesterday I was also enabled to make an observation which is very interesting, since it gives the measure of these little white things. At eight o'clock in the morning a small black spot was visible near the centre of the sun. It was quite round, without penumbra at all, and it would have been mistaken for a planet, except for its edge, which was all saw-like in appearance, being formed by a row of these white things (which I call willow-leaves), exceedingly small, well defined in shape, and all directed towards the centre of the spot. They were certainly of the same shape as the others, the only difference being that here they were oriented, and in the rest of the field they were pointed in every direction.

The atmosphere being very fine, I measured the diameter of the spot, and found it 6"·38, and availing myself of some of the leaves a little more prominent than the others, I counted how many of them formed a quadrant of the circumference. I found that there were not more than eight and not less than six, so that their total number was from thirty-two to twenty-four. At 10.30 the spot had changed, and a segment was filled up with these things, so that the edge subtended a chord almost equal to the diameter. F. Ferrari, my assistant, and myself counted in this seven of these little things, which agrees with the preceding. From these data it is easy to conclude that the real diameter was between 0"·83 and 0"·62, or about 300 miles, including the distance from centre to centre of the leaves. As the interval was about one-third of their size, their real dimension should be 0"·55 or 0"·40. The longer diameter is about twice as much.

Now the question is reduced to measures, it will be very easily decided whether these are the willow-leaves of Mr. Nasmyth or not. Certainly they are not the rice-grains, if for these we understand, as in the Month. Not., No. 8, p. 224, things 8" or 10" long. Nor is this the cotton-like appearance which is seen occasionally, and in which the willow-leaf appearance is transformed when the atmosphere is agitated and the view is troubled. About the difficulty of seeing them, this is very great indeed, and they are never better seen than in the first minutes, before the object glass, the air in the tube, and the eye-piece become hot; it seems that the change of temperature produced by the sun's rays in the instrument destroys the distinctness of vision, and I have found it useful to let the instrument cool before repeating the observations. It is therefore not wonderful if they are not plainly seen by every one. But, besides this, are they really constant in the sun itself? This is a

Now let us come to the penumbra of the spots and its structure. According to what I have seen, they are these little things which, flowing bodily from the surrounding photosphere on to the chasm of the penumbra, and directing themselves towards the nucleus, give to the penumbræ the radiated form which has been observed by many long ago. During this course, or voyage, they seem occasionally to increase in bulk, so that they are more plainly visible, and being projected on a blacker field, and isolated, they are seen even in conditions of atmosphere insufficient to show them in the general field of the sun. Sometimes I have seen them detached and melting away, which happened yesterday, in the small round spot, when one of these little things was detached from the serrated edge and went near the centre of the spot, where it was dissolved in a short time. Sometimes they unite in very long lines, and melt together, forming a rounded-edged stream, as I described so long since as 1852. I think, therefore, that the willow-leaves

are to be distinguished from these currents, and that only these are those called thatch straws of which the Astronomer Royal speaks. But this distinction does not include that they are in reality different things, since the thatch straw or currents may be produced by the melting and dissolving of willow-leaves, which are not certainly solid things. These are disposed in a converging direction towards the centre of the spot when the spot is round and regular, but they are disposed of in every direction when the spot is irregular or dissolving.

It is not within the scope of this letter to enter into theoretical discussion, but only to describe what I have seen, and I shall be obliged if British astronomers will inform me if the same names are applied by them to the same things or not.

A. Secchi.

PROCEEDINGS OF FOREIGN ACADEMIES.

PARIS.

ACADEMY OF SCIENCES.—August 14.—A memoir was contributed by M. Pasteur, containing the continuation of his investigations upon the preservation of wine. The author remarks that this problem consists solely in preventing the development of the vegetable parasites which destroy its flavour. In order to destroy the germs of the parasites, he exposes the wine for a short time to a temperature of about 60° or 70° C., and, by ex-periments made with many French wines, the author has ascertained that wine which has been thus heated and again cooled, has not in the least deteriorated. His previous researches, to which we have before referred, have shown that new wine, preserved from contact with the air, does not change in any way; whilst the same wine, under the influence of oxygen, and more rapidly in the light, becomes in colour like wine of ten or twenty years old, and in flavour similar to wine that has taken a long voyage. M. Pasteur considers that the problem of the preservation of wine for any length of time is solved, and that now it only remains for the public to profit by the results of science.—M. Pasteur also presented a note by MM. Leplat and Jaillard, containing the results of experiments made by the authors on the inoculation of a disease of the cow into rabbits. The conclusions arrived at are, that this disease (charbonneuse) is not a parasitic malady; and that the Bacteridies which are found are not the cause, but only a symptom of the malady. M. Pasteur made a few remarks upon this communication.

M. Leon Foucault contributed a memoir "On a Modification of Watts' Governor." The author, from his theoretical considerations, draws the practical conclusion that it is possible to con-struct a pendular system which would be capable of attaining any speed, and which would conform in every respect to the laws of the ordinary conical pendulum.—A letter was received from M. Simonin, relating to the discovery in the island of Elba of instruments of the Stone and Bronze Age. A communication was read from M. Gernez "On the Crystallization of Supersaturated Saline Solutions." We refer to both these papers in our "Scientific Notes."—M. Dousmani presented a note, entitled "Anatomic Researches upon the Anterior Portion of the Globe of the Eye."—Another communication was made by Professor Sylvester, "On a Theorem of Elementary Algebra."—An elaborate memoir was read by M. Faye, "On a Means of Avoiding the Errors of the Compass due to the Action of the Iron in Vessels." -M. Bobæuf presented a memoir "Upon the Properties of Phenic Acid and of Sodium Phenol, with relation to the Application of Phenic Acid to Therapeutics."—A note was read by M. Schutzenberger, "On some new Derivatives of Indigotine." The author has submitted Isatine, derived from Indigotine, to energetic reducing agents, raised to a temperature above 100° C., and has thus obtained three new bodies of a green, red, and white colour. An analysis of these bodies is given. The name Isatochlorine is proposed for the green matter, Isatopurpurine for the red, and Isatone for the white product.

M. Rocher, in a short note "On the Food of Molluscs." states that he has frequently observed in the deserts on the North of Africa, quantities of these animals obtaining the water they need by sucking the plants and grasses which grow in that region.—Mr. Kæberlé sent a note, "On the Treatment of Kystes of the Ovary by Ovariotomy."—After this communication, M. Thenard mentioned the remarkable cure of a patient on which M. Kæberlé had operated.—M. Trecul sent another paper "On the Laticiferous Vessels and Liber of the Apocynées and the Asclépiadées."

M. Fournet presented a paper, "On the Periodic Character of Stormy Days." The author has deduced several remarkable results from a total of about 3,300 observations, made near the Saone, during a period of thirty years. The curves given by these observations show that in winter there are but few storms, one is noticeable about 2nd or 3rd of December, and another about the 15th, the winter being generally closed by a storm at the end of February. In spring, storms are moderate till April 7th; they then increase to May 22nd, about which time occurs one of the greatest storms of the year. Then, up to the 5th of June, there are few storms, but afterwards on the 8th, 12th, and 18th the chances of storms greatly increase, the 29th of June being marked by a severe thunder-storm. July is a period of quiet compared with June and August. In autumn the critical dates are the 1st, 9th, 23rd, and 30th of September to October 1st, followed by the crisis of the 7th to the 11th of October. The author remarks that the results of his long-continued observations lead to the belief that there is a regularity in the occurrence of storms, which, hitherto, have been regarded as mere accidental disturbances of the atmosphere.

M. Villeneuve-Flayosc sent the conclusion of his paper on terrestrial vibration. He remarks that as earthquakes are perpetual, and their laws of propagation the same as those of sound, therefore the regular distribution of the nodal and ventral segments observed upon a vibrating plate ought to apply to the earth. The regularity of the subdivisions ought to be seen in terrestrial undulations, and a symmetrical form observed in submerged rocks as well as in those above the sea.—In a letter to the Secretary, M. Elie de Beaumont, M. Zantedeschi repeats his claim to the priority of the idea of applying the electric telegraph to the transmission of meteorological observations. To establish this, he publishes two letters he received from Baron Bruck, in reply to letters which he addressed him in 1849 and 1850, on the subject of establishing meteorological observatories on the principal telegraphic lines in Austria.

MUNICH.

ROYAL BAVARIAN ACADEMY OF SCIENCES.— March 4.—M. Haneberg communicated contributions to the Knowledge of Aircenna and Albertus Magnus.

March 11.—Professor Bischoff read a paper, "On the Occurrence of a Peculiar Sac containing Blood and Hœmatoidine on the Placenta of the Otter." This singular sac, to which attention is called by Professor Bischoff, is situated in the midst of the band-like Placenta of the ovum, over the back of the embryo; it is free from villi but surrounded by a fringe of long villi, distinguished by their reddish-yellow colour. corresponding spot of the uterine placenta is destitute of the uterine mucous membrane and its glands. The contents of the sac consist of blood and a crystalline yellow matter (hæmatoidine). -M. Hermann von Schlagintweit-Sakünlünski communicated an elaborate memoir "On the Temperature, Stations, and Isothermals of Upper Asia," in continuation of former papers "On the Meteorology of India and Upper Asia." He describes the materials at his command; and gives a tabular analysis of the observations on temperature made at numerous stations in the Himalayas and neighbouring regions, and examines the results deducible from these data, and from the consideration of the form, eleva-

tion, and disposition of the land.

March 18.—M. J. H. von Hefner-Alteneck communicated a paper, illustrated by numerous original drawings, "On the Evolution of the Forms of the Helmet from the Carlovingian Period to the Seventeenth Century."

March 28. On this the 10fth anniverse of

March 28.—On this, the 106th anniversary of the foundation of the Academy, Baron von Liebig spoke "On Induction and Deduction;" the Secretaries read obituary notices of Franz Streber, L. C. Treirranus (with a chronological list of his numerous writings, extending over a period of about sixty years), Rudolph Wagner, and Johann von Geissel. Professor Nägeli also delivered a discourse, "On the Origin and Conception of the Species in Natural History."

REPORTS OF LEARNED SOCIETIES.

ROYAL SOCIETY. — June 15. — Major-General Sabine, President, in the chair.

The following papers were read:—
"On the Development of Striated Muscular
Fibre." By Mr. Wilson Fox, M.D., Professor
of Pathological Anatomy in University College,
London. Communicated by Dr. Sharpey.

The discrepancies in the statements made by various observers on the structure, as illustrated by the history of the development of striated muscular fibre, have induced the author to submit the question to a renewed and independent investigation. He has examined the process in the tadpole, the chick, the sheep, and in man, and with results which correspond very closely in all these classes.

"Researches on the Structure, Physiology, and Development of Antedon (Comatula, Lamk.) rosaceus." By Dr. W. B. Carpenter, F.R.S.

The author, after adverting to the special interest attaching to the study of this typical form, as the only one readily accessible for the elucidation of the life-history of the Crinoidea, states it to be his object to give as complete an account, as his prolonged study of it enables him to offer, of its minute structure, living actions, and developmental history, taking up the last at the point to which it has been brought in the memoir of Prof. Wyville Thomson.

The structure, physiology, and development of the digestive, circulatory, and respiratory apparatus, and of the nervous and muscular systems, will form the subject of a future

memoir.

"On the Chameleon's Retina; a further contribution to the Minute Anatomy of the Retina of Amphibia and Reptiles." By Mr. J. W. Hulke, communicated by Mr. William Bowman.

The chameleon's retina is peculiar in having a fovea and pecten, and in the nervous conducting fibres crossing the connective-tissue fibres instead of running parallel to them. The fovea is a circular pit situated at the posterior pole of the eyeball. A dark brown dot surrounded by a lighter areola marks its centre. Here the bacillary layer, which contains cones only, is alone present. The cones of the fovea are long, slender cylinders placed vertically upon the choroid. From the centre of the fovea outwards, the cones become stouter, shorter, and more numerous towards the periphery of the retina, where they are flask-shaped. The other layers reach their maximum development around the fovea at successively increasing distances from its centre. From the inner ends of the cones, fine fibres proceed obliquely from the outer to the inner surface of the retina in a radial direction from the centre of the fovea to the peri-phery of the retina. These fibres connect the cones with the cells of the outer granule-layer; they next form a thick plexus at the inner sur face of this layer, which I term the cone-fibre plexus; then traverse the inner granule-layer, in which they connect themselves with round and roundly oval cells, and are continued through the medium of the ganglion-cell-like cells of this layer into the granular layer, where they join the processes directed outwards from the cells of the ganglionic layer. Thus they constitute an anatomical path between the cones and optic nerve-fibres. The pecten lies eccentrically at 1" from the centre of the fovea. Its minute structure agrees with that of the gecko's. The distribution of the optic nerve-fibres with respect to the fovea resembles that which obtains with reference to the yellow spot in the human

eye.

"Additional Varieties in Human Myology."
By Mr. John Wood, F.R.C.S., Demonstrator of
Anatomy in King's College, London. Communicated by Dr. Sharpey.

In the past winter session thirty-six subjects

In the past winter session thirty-six subjects have been dissected in the anatomical rooms at King's College. In them the author has directed especial attention to the combinations of muscular aberrations in the same individual, with a view to obtain data for ascertaining any relation that may subsist between such abnormalities in different parts of the body.

In the body of a fine young negro, which was very carefully dissected and observed, few departures from the ordinary muscular arrangement were observed, and these were present only in the upper extremity. In the left arm was a complex arrangement of the flexor sublimis digitorum. Two large muscular slips from the coronoid origin of this muscle passed to the tendons of the deeper muscles. The inner and more superficial terminated in two long tendons which passed separately under the anterior annular ligament, and became blended in the middle of the palm with those of the flexor profundus going to the fourth and fifth fingers. The outer slip also divided (a little higher up) into two tendons. One of these joined, in the middle of the forearm, that of the flexor pollicis longus; and the other, after receiving a muscular head from the radius below the last-named muscle, became connected in the palm with the perforating tendon of the index, giving part

origin to the first lumbricalis. Here were three additional tendons intermediate between the flexor sublimis and profundus, passing separately under the annular ligament. Additional tendons have been before met with in this position in Europeans, but the author does not remember to have met with them to the extent seen in this negro. In the same arm, the third lumbricalis joined the ulnar side of the middle finger instead of the radial side of the ring-finger, which had no lumbricalis. The interessei muscles were regular, that to the thumb (the first palmar of Henle) was also present. All the palmares muscles were well developed, as well as the plantares and the peroneus tertius. The latter was connected at its origin (as is commonly found) more intimately with the extensor tendons of the fourth and fifth toes, than these were with those of the second and third.

Attention having been drawn by Mr. Huxley to the importance of ascertaining the arrangement of the interossei muscles in the hand and foot, and especially the usual or most frequent manner of insertion in the toes in the human subject, the author has carefully examined these muscles in a considerable number of subjects. It was found that in the hand, although the origin of these muscles is usually such as described in anatomical works-viz., of the dorsal by a double penniform arrangement from the adjacent metacarpals, and of the palmar by a single penniform origin from the metacarpal of its own digit, yet in several cases the so-called first palmar interesseus—viz., that of the index, had a bi-penniform origin from both second and third metacarpals, exactly as that on the cor-responding side of the same digit in the foot.

The insertions of these muscles are invariably divided between the base of the phalanx (where it is blended with the capsular investment of the joint derived from the extensor aponeurosis) and the sides of the extensor tendon, passing with the fibres from the *lumbricalis*, partly to the middle, and chiefly to the ungual phalaux.

In the foot, the same occasional reference to the type occurring in the hand is found, in the origin of the first plantar interesseus. This muscle is sometimes a double penniform, arising from the adjacent second and third metatarsals on the plantar aspect of the second dorsal, and, like it, perforated by the communicating artery. In both the hand and foot where these irregularities are found, the respective digits to which the muscles are attached seem somewhat larger in proportion than is usual, the size and extent of attachment of the muscles appearing to be deter-mined by the size and uses of the corresponding digit. The foregoing abnormalities of the in-terossei reflect some light upon the differences in the normal arrangement in the upper and lower extrem ties, which have often perplexed anatomists. The terms dorsal and plantar or palmar, referring to position only, and not to the action of these muscles, have apparently somewhat obscured the homologies of the separate muscles.

In the hand, the middle digit being the most bulky, has a double or dorsal interosseous muscle for each of its divaricators. Its divaricator to the pollex excludes from the third metacarpal the divaricator from the pollex of the second digit, and obtains origin for itself from the dorsal part of the second metacarpal, so becoming a dorsal muscle. The transverse convexity of the back of the hand gives a dorsal prominence to the middle metacarpal and its digit over the rest. This explains the circumstance of this muscle assuming a dorsal position over the palmar interesseous of

the index.

In the foot, the first and second metatarsals and their digits attain a greater proportionate size and dorsal prominence, to fulfil their chief functions of sustaining and propelling the body. Here we find the divaricator to the pollex of the second digit (the first palmar interesseous of the hand) becoming developed into a double penniform muscle, with a dorsal position, excluding the divaricator to the pollex of the third digit (the second dorsal of the hand) from attachment to the second metatarsal, and itself acquiring an origin from the third metatarsal.

An occasional recurrence of one to the type of the other might have been expected under peculiar conditions of development. Mr. Huxley informs the author that he has found, almost invariably, that the interesseous muscles in the foot are inserted entirely into the bases of the phalanges, and are not, as in the hand, prolonged by a tendinous expansion in common with the *lumbricales*, into the extensor aponeurosis, and so to the middle and extreme phalanges. He looks upon this as one charac-

teristic distinction between the hand and foot. In the arrangement which the author believes to be almost general in respect to the insertion of the interossei in the foot, and which supports essentially Mr. Huxley's view, it will be found that the bulk of each tendon is implanted into the base of the first phalanx, blending with the lateral ligaments of the metatarso-phalangeal joint, while only a few of the dorsal fibres are sent upwards and forwards, to meet and blend with the slips sent down to the sides of the joint from the extensor aponeurosis. These are not, however, so distinct and powerful as we find them in the hand, and, in their thin and scattered appearance, differ entirely from the insertion of the *lumbricales* tendons into the more forward part of the same extensor aponeurosis.

"On New Cornish Minerals of the Brochantite Group." By Professor N. Story Maskelyne, Keeper of the Mineral Department, British Museum, Communicated by Mr. A. M. Story

Maskelyne.

In March last, the author's attention was drawn to a very small specimen of Killas, with some minute blue crystals on it, associated with a few equally small green crystals. The latter he proceeded to investigate with the goniometer. They proved to have almost identical angles with Atacamite, and presuming them to be crystals of that mineral, he neglected them in order to measure the angles of the blue crystals. These proved also to belong to the prismatic system, and evidently were a new mineral. The specimen had come to the Museum from Mr. Talling, of Lostwithiel, a dealer from whom the National Collection has received a very large proportion of its finest Cornish minerals, and whose attention had been called to this specimen by the novelty of its appearance. Mr. Talling no sooner was apprised of the interest attached to his little fragment of Killas, than he set energeti-cally about tracing it to its locality.

After a short time he succeeded in finding this locality; and though he has not yet divulged it, he soon forwarded other specimens to the author at the British Museum. He has since found fine masses of the minerals, which are described in this memoir, and they are now in the British Museum collection.

ART.

THE NATIONAL PORTRAIT GALLERY.

BOUT fifteen pictures have been added to this collection during the past year. The pictures are still only to be seen under great disadvantages. A dark first floor in Great George Street, Westminster, contains the nucleus of what we all hope will grow into an important national collection; it has already outgrown the limited space at the command of the trustees, and even the staircase walls are now lined with pictures of great historical interest. It is difficult to see where future acquisitions can be placed, and we trust that, before another year has elapsed, the Government will take some steps to provide a more suitable building for the display of the many interesting works that are now concealed rather than exhibited.

The work of forming a National Portrait Gallery has proved to be more practicable than promoters probably anticipe tion now numbers over 300 works, of which about half have been acquired by purchase, the remainder having been either presented or bequeathed. Two obstacles stand in the way of its more complete development. One of these is the miserable accommodation at present provided, and is merely a temporary evil; but it is calculated to make benefactors hesitate before they consign any works of importance to lodgings so ill-suited for their reception. The other, and more serious obstacle, to the success of the project is due entirely to the short-sighted policy by which the annual Parliamentary grant of 1,500l. is deprived of half its value. The trustees are empowered to purchase pictures to this amount (less the expenses of the Gallery) within the year, and they are not at liberty to exceed it; but the surplus that remains after their purchases have been made must be repaid into the Treasury at the end of every year. The trustees have, therefore, no power to create an available fund for the purchase of any fine portrait that may be in the market, and the money is liable to be, and actually is, dribbled away in the purchase of second and third-rate productions. It would be a wiser policy to make the grant absolute to the trustees, and to leave

the expenditure in any given year to their judgment. A year may pass without any portrait of note being offered for sale. In the course of another year, it may become the duty of the trustees to expend all their funds; and in a third year they may easily find their funds insufficient for the purchase of some great work that they would like to make national property. By simply leaving the surplus in their hands, instead of reclaiming it for the Treasury, a fund might be created which would enable them from time to time to purchase pictures that are now unattainable; the temptation to purchase cheap, indifferent portraits would be checked; and the character of the collection would become vastly changed for the better. Two instances at once occur to us, which illustrate the bad working of the present arrangement. The trustees had not the means to purchase Copley's noble portrait of Admiral Duncan when it was offered for sale by Lord Lyndhurst's executors, and it was bought over their heads at Messrs. Christie and Mason's last year; and during the present year a wretched likeness of Cobden has been added to the collection, on the sole ground, as we must suppose, of cheapness.

The most important additions to the collection during the past year consist of three fine portraits by the late Sir Watson Gordon, presented to the nation by his family; and two portraits by Lawrence and Hilton, given by the Duke of Buccleugh. Sir Watson Gordon was the best portrait painter of our degenerate time, and these pictures are among the best he painted. One is a full length of the late Lord Dalhousie, another is a full length seated figure of De Quincy, and the third is a kit-cat of the late Professor Wilson. The portrait of Lord Dalhousie is so placed under the skylight on the staircase that it cannot at present be seen. But it appears to be one of Gordon's later works, vigorous and life-like. The portrait of De Quincy was painted in the artist's best time, with evident appreciation of the mental characteristics of his sitter; it is noticeable as being one of the best works in the collection, and a true portrait of the man, bearing the outward marks of his subtle and refined mental capacity, a great acquisition, whether we look at it as a portrait of a remarkable literary man, or as a fine example of the style of a great modern painter. The portrait of Professor Wilson was painted probably about the same time, or earlier, than the De Quincy, but it is an inferior work, and fails to give an idea of the manliness and humour of Christopher North. Lawrence's portrait of Campbell the poet is the gift of the Duke of Buccleugh; it is said to be a very good likeness, and it is certainly a good example of the painter's more fashionable manner, when he no longer painted in the vigorous style of which the gallery possesses so fine an example in the portrait of Sir James Mackintosh. A portrait of Keats, the gift of the same nobleman, by Hilton, is also a valuable acquisition, and bears intrinsic evidence of resemblance, though the drawing of the head is hard and conventional.

Another interesting portrait has been presented by Sir J. Bowring, a full-length of Jeremy Ben-tham, when a boy of thirteen; and two heads of Southey and Coleridge, when both were young men, by a local painter of Bristol, named Vandyke, have been acquired by the trustees. A half-length picture of Queen Elizabeth by an unknown painter has been purchased, which has a regal look, and is very interesting as presenting, with more than usual accuracy, the holiday costume of the Queen when she appeared decked out in all her jewellery. A coarse portrait of Father Matthew has also been acquired during

the past year.

No congratulation can be offered to the trustees on their purchase of a very inferior portrait of Cobden. While the memory of his fresh, genial countenance yet lives in the hearts of his contemporaries, it becomes a duty to record a protest against the exhibition of a portrait which has not the merit of presenting even an accurate map of his face, which certainly fails to give any notion of his power, his kindliness, or his humour. A dull, heavy, liver-coloured countenance, like that of a man afflicted with the spleen, will represent to future generations, if this portrait is to remain in its place, the man who deservedly stands among the greatest benefactors of his country. If this was the best picture that could be procured, it would have been far better to make choice of a good photograph, which could not be more unlike his true expression, while it would at least give an accurate representation of the construction of his head and features. It is to be hoped, however, that, not only in this

case but in many others, the trustees will at a future time exercise their discretion, and profit by the Act which has been so beneficial in enabling the trustees of the National Collections to dispose of indifferent pictures, by taking advantage of which the National Gallery has been weeded of nearly all its rubbish, and is rapidly growing to be one of the first collections in Europe. A change, which will allow them to husband their resources instead of frittering them away in the course of the year, will put them in a position to purchase the best portraits as they come into the market, whereas at present they are tempted to buy the worst.

Great credit is due to Mr. Scharf, the accomplished curator of the gallery, for his constant efforts to make the best use of the accommodation at his disposal, Many of the pictures cannot be seen, as a large number are necessarily hung in dark corners and out of sight; but by continually changing the places of the pictures, the public have an opportunity of seeing them all; and whenever a work of more than usual merit or interest comes into the gallery, it is placed on an easel near one of the windows, so that it may be seen to the greatest advantage. Thus Reynolds' portrait of Keppel, which is one of the few works of the master that has neither been injured by time nor touched by the hand of the picturerestorer, was well seen for some months; and in the same way, Copley's portrait of Lord Mansfield was made thoroughly familiar to the public. By thus rehanging the pictures during the few weeks when the gallery is annually closed, it presents the appearance of a new collection when it is re-opened. Great credit is also due to Mr. Scharf for the pains he has taken in producing the catalogue, which is not only a useful guide to the collection, but an excellent handbook of the painters and of the historical characters they have represented.

MUSIC.

PROMENADE CONCERTS.

THE Promenade Concerts of Mr. Mellon are a pleasant break in the silence of a London August. No wonder that the huge arena of Covent Garden is nightly thronged to listen to the playing of such a band as he has collected. Musical people must, indeed, go there or nowhere; but it is not only for default of other music, but for the intrinsic goodness of what is given there, that they do wisely in flocking to Mr. Mellon's "Promenades." The motto of one of these popular concerts might be that of the utilitarian philosophers—"The greatest happiness of the greatest number." Something is provided for people of all tastes; every kind of music is represented—bad, in the conventional sense, as well as good—but the bad is not so wholly bad as to disgust the lovers of the greatest as to the good; nor is the good so terribly severe as to frighten away the lovers of the other sort. No one, probably, who goes to a promenade concert expects to enjoy everything he hears. If he does, he must have a wonderful catholicity of taste; but while he is enjoying one thing, his neighbour is looking forward to something that is coming; and each, if he is a fit subject for the entertainment, makes up his mind not to be bored during his intervals of expectation. Some-thing like this must explain the extraordinary melange which is exhibited by the programme of one of these evenings. Lake most great inventions, the production of the "Promenade Concert," in its present form, is due to the enterprise and sagacity of more than one man. Musard, of Champs Elysées celebrity, is credited with the origination of the idea, but between the primitive "Concert Musard" and the Promenades and "Classical Nights" of Mr. Mellon, there have been many stages of development. It is mainly, no doubt, to the great M. Jullien, the clever leader and the Rolless clever follower of the popular taste, that the institution owes its present importance. The fostering care of that curious nondescript genius was happily employed in nursing it through the years of its childhood; strong enough, now, not to want dandling, it thrives vigorously under the guardianship of an accomplished musician, who is too thoroughly a master of his art to need the help of his predecessor's small quackeries. But, like that predecessor's small quackeries. But, like that predecessor, Mr. Mellon has shown that he has the knack of meeting the popular taste without lowering the quality of the pabulum he provides for it. Year by year his programmes, his cartes du jour, have been improving, till wholesome dishes now form the staple of the feast, with as little garnishing of indigestible hors d'œuvres, or tasteless sweets, as can well be ex-

pected at a popular entertainment. Dependent as such enterprises are for success upon exactly hitting the mean which is most acceptable to the greatest multitude, the quality of the music produced may be taken as a fair index of the degree of musical cultivation current among the people. Mr. Mellon's programmes, even those of the non-classical nights, read in this way, do credit to the taste of the myriad. They are incongruous enough—the principle of contrast is at the bottom of the Promenade Concert theory — but whatever appears is usually the best in its particular kind, old or new. If you are to hear, for instance, a comic bass singer as a relief after a sober bit of symphony, the chances are that he will strike up "Largo al Factotum," or "Non piu andrai." The hardened concert-goer might murmur at such conservatism, but a promenading audience is not blase to Rossini or Mozart. Hundreds, probably, have not heard a good band or a good singer for a twelvemonth past, and if there are a few in the house who know every note of these masterpieces by heart, these few are wise enough, having enjoyed them a hundred times, to enjoy them for the hundred-and-first. if piano-playing is on the bills, the "fan-tasia" dashed off by the nimble fingers of little Miss Marie Krebs will, at least, not be a bad specimen of a bad style. It will most likely be a bit of the genuine workmanship of Liszt or Thalberg, with some spirit and meaning in it, and not one of the dreary monstrosities manufactured in imitation of those wayward geniuses. And so downwards, even to the waltzes and the polkas, the buffo-quadrilles, and the cornopean solos. There is a waltz which is just now the favourite among the dance music played at Mr. Mellon's—"Mabel," by Mr. Godfrey, the popular band-master. Its first thought is fresh and ear-catching, so fresh, indeed, that one can hear the phrase some scores of times, without beginning to think it vulgar. Though the composer's ideas have quite failed him after this opening strain and its reply, there is yet a style and swing in the piece which distinguish it from the common ruck of dance music. No wonder that this "Mabel" makes a nightly furore at Covent Garden, when played with such a pomp of tone as Mr. Mellon brings out of his band. Here, indeed, lies one secret of the attractiveness of the Promenade Concerts. It is the only kind of entertainment accessible to the general public in which that mighty instrument, a full band, is made the The contrivance of making the most of. orchestra perform the vocal functions of an opera company, is not only a happy means of reproducing in an effective shape the kind of music most liked by the mass of mankind, but it gives the hearer an insight into the constitution of a band. He learns to distinguish the tone, character, and expression of the various instruments—a faculty upon the acquisition of which depends much of the enjoyment of the more legitimate orchestral music. It is curious to notice what favourites particular instruments become when thus made soloists. The large but soft tone of Mr. Hughes' ophicleide is heard in this way to signal advantage. In "Il Balen," he is as sure of his encore as Signor Graziani. The clarionet of M. Lazarus, or the hautboy of Mr. Barret, is an admirable soprano; and tenor songs are sung, as few tenors can sing them, on either violoncello of Mr. Collins or the cornet of Mr. Levy. Curious effects of "timbre" are thus sometimes produced. One evening there was to be heard the bass duet from "Israel," "The Lord is a Man of War," upon a couple of euphoniums. (The cuphonium, by the way, seems to be a twin-brother of the ophicleide.) Whatever purists might think of the experiment, the effect was superb. But the pet instrument, the one indispensable feature of the Promenade Concert is the cornet. Cultivated musicians have no affection for this intruder into the regular orchestra. Its sound is thick, dull, and cloying, a vulgar imitation of the trumpet, which it resembles in about the same way as aluminium-gold does the genuine metal, but it is the darling of the popular ear. Mr. Levy's play, with its whirlwinds of "double-tonguing," is certainly a miracle of clever attainment, and makes one almost forget for a time the intrinsic vulgarity of the instrument.

Of the music Mr. Mellon has been playing we need scarcely speak in detail. We may notice, however, in regard to the more serious part of it, how here, as in other quarters, the popularity of M. Gounod is on the increase. A "Gounod Night" drew one of the largest audiences of the classical evenings, and some of the pieces which

were then played have become stock favourites. One of these is that "meditation" on a prelude of Bach, which seems never to be played anywhere without completely subduing the audience. Strongly as one may be prepossessed against such devices of appropriation and adaptation, it is impossible not to feel in this little piece a happy blending of two noble and beautiful ideas; as complete a unity of result as if it was the product of a single mind instead of two; and these working at the distance of a century. The pompous pageant-march from the "Queen of Sheba," and the quaintly-fascinating "Bacchanal Dance from "Philemon and Baucis," are two other pieces which Mr. Mellon has been making familiar to his habitués.

The symphony which was played on the "Gounod Night" was, unfortunately, one of the poorest performances which the band has given, evidently for lack of proper rehearsal. It was clear that neither players nor conductor knew the work; so its execution was languid and

confused.

The "Beethoven Night" drew a vast audience. This season, as last, Mdlle. Marie Krebs is the pianist, and again astonishes all listeners by the feat of playing without book the grandest and most complex pieces ever written for the instrument—for example, on this "Beethoven Night," the great Concerto in E flat. We shall be much surprised if this young lady, who is not now the child she seemed a year ago, does not take her place, in a little while, as one of the foremost players of the day. She cannot help becoming one of the greatest of executants, and there are signs in her playing which seem to promise that she may rise to be something more than this. Madlle Liebhart has been hitherto the lady

singer of Mr. Mellon's season. Her performances are of a kind which it would be superfluous to criticize. Signor Ferranti, a baritone who can sing, and has a real gift of comedy, has been the

second vocalist.

The promised selection from "L'Africaine" was produced on Monday, with as much effect as could be expected, considering how strange most of the melodies would be to the audience. It includes the introduction; the two songs of Nelusko ("Adamastor," and "Fille des Rois"); Selika's "sleep song," which M. Lazarus plays delightfully; a prominent part of the chorus of bishops, from the first act; part of the "map" duet; part of the bridal chorus in the fourth act; and, as a *finale*, the famous unisonal pre-lude to the last scene. This last made, of course, the same effect as elsewhere. The magnificent crescendo produced at the bidding of Mr. Mellon's bâton, in its second phrase, would of itself have been enough to prove the excellence of the orchestra.

MUSICAL NOTES.

M. Gounod's "Reine de Saba" ("Irene") is to be repeated this day at the Crystal Palace, with the cast of last Saturday week. The whole of the vocal music is being published, we observe, with the English words, by Messrs. Cramer & Co., who have bought the English copyright.

THE cast of the "Africaine" for the English opera season is understood to be as follows:— Selika, Miss Pyne; Ines, Madame Sherrington; and Vasco, Mr. Adams. For Nelusko both Mr. Alberto Lawrence and Mr. Weiss have been

Mr. Howard Glover, who was till lately musical correspondent of The Morning Post, announces the coming publication of three volumes of "Musical Reminiscences." Those of our readers who remember the "monster concerts" which made Mr. Glover so notorious, will not have been surprised at the statement that his recent bankruptcy was caused by the failure of his last undertaking of that kind. But we had rather be spared making any comments on the story.

"OPERA DI CAMERA" has reappeared at its old quarters, the "Gallery of Illustration," under Mr. German Reed's management. The two pieces now being played are "Widows Be-witched," by the lady known as Virginia Gabriel, and a farce of Offenbach, called "Ching-chow-

Mr. John Hullah and Dr. Wylde are mentioned as candidates for the chair of Music in the University of Edinburgh, vacant by the death of Professor Donaldson.

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